Aug 24, 2022

2022 Annual Industrial Pretreatment Meeting

City of Carrollton

Introductions

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Consistently Compliant Industries

- Electroplate Circuitry- Capital
- Image Industries
- International Paper- Belt Line
- Quality Powder Coating
- Ralcorp Frozen Foods
- Texas Finishings
- United One Laboratories
- Wash Solutions
- Western Extrusion
- WMC

Congratulations!

City of Carrollton

The 2022 Environmental Distinction Award

- Began in 2003
- Application is open to all consistently compliant industries of the 2021-2022 permit year.
- Chaired by City Council Member Adam Polter
- Presented during the first city council meeting in December.

Basics

Application

CARROLLTON
TEXAS

Industry Application for 2022 Environmental Distinction Award

GENERAL INFORMATION

Name of Industry: _____

Address: _____

Phone No: _____ Fax No: _____

Website, if any: _____

Brief Description of Business: _____

_____

_____

_____

Date Operations Started in Carrollton: _____

Contact Persons:

Name: _____ Title: _____

Name: _____ Title: _____

Size of the Business (# of employees):

_____ Small (1-20) _____ Medium (20-100) _____ Large (0ver 100)

ENVIRONMENTAL ELEMENTS

(Supplemental information included on the following pages)

Briefly describe in detail how the business meets the following elements of the City's Environmental Distinction Award

Pollution Prevention Achievements
Commitment to Environmental Sustainability
Environmental Leadership
Your Industry's Specific Role in the City's Goal of Creating a Sustainable Future

Please submit this cover sheet along with all the attached materials not later than 11:30 a.m. on November 15, 2022, to:

The Environmental Distinction Awards Committee
c/o Katherina Kang, Industrial Pretreatment Coordinator
City of Carrollton Environmental Services Department
1945 E. Jackson Rd
Carrollton, TX 75006

ASPECTS OF ENVIRONMENTAL ELEMENTS

1. **Pollution Prevention Achievements**

   Briefly explain/ describe what your company has done in relation to pollution prevention. Examples include:

   - Eliminated or significantly reduced the use of toxic products or harmful air emissions in 2018 and 2019
   - Reduced the risk posed by hazardous materials through design, engineering, or other practices.
   - Where/if applicable, engaged in integrated pest management.
   - Reduced the amount of waste discarded.
   - Used sound recycling approaches.
   - Conserved resources through –
     - Energy efficiency - reduce the use of electricity or fossil fuels by using energy-efficient products; using solar or passive heating and cooling systems; or engaging in other energy efficient practices.
     - Water conservation – reduce water use, increase reuse of water resources, increase use of rainwater and runoff or utilizing land use designs that reduce runoff or use drought tolerant plants,
     - Efficient use of raw materials or use/procurement of recycled materials

2. **Commitment to Environmental Sustainability**

   In this section, please explain/describe your company's…

   - Policy committing to environmental excellence
   - Workforce and management team that recognizes environmental sustainability and quality as an integral part of their job
   - Continuous process to evaluate pollution prevention opportunities
   - Environmental management system or quality system that integrates environmental factors and regulations into strategic business decisions and day to day operations
   - Use of environmental cost accounting or environmental management accounting.

3. **Environmental Leadership**

   In this section, please explain/describe what your company has done in terms of. . .

   - Work done with manufacturers, suppliers, customers, disposers and regulatory agencies to minimize the environmental impacts associated with the product(s)
   - Leadership in community environmental programs
   - Leadership in environmental programs in their industry
   - Participation in federal, state or local voluntary pollution prevention programs.

4. **Your Industry's Specific Role in the City's Goal of Creating a Sustainable Future**

   Describe any 2018-2019 activities and future plans regarding your company's participation or partnership in endeavors that are aimed at meeting the goal of creating a sustainable future for its businesses and its residents. Examples would be feeding programs done in Carrollton, creek clean-ups, storm drain markers, volunteer partnerships with city programs, etc.

ADDITIONAL INSTRUCTIONS

Include documentation to support your responses.

City of Carrollton

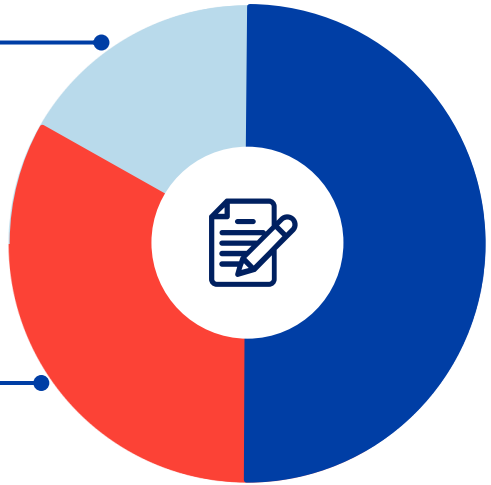
2021-2022 Pretreatment Year Recap

2
SNC Industries

Industries with significant effluent violations

4
Stormwater NOVs

SWPPP and stormwater violations



6
Pretreatment NOVs

Effluent violations

City of Carrollton

Reporting Reminders

01

Flow changes

Notify of flow changes 20% or greater.

02

Permit Application

Application due 60 days prior to end of permit

03

DMR Section B

Wastewater discharge

SECTION B - WASTEWATER DISCHARGES

Provide the following information on discharge flow rate for this six month reporting period:

1. Average Wastewater Volume Discharged from Non-Manufacturing Operations (gpd) _____
2. Average Wastewater Volume Discharged from Manufacturing Support Operations (gpd) _____
3. Average Wastewater Volume Discharged from the Manufacturing Process (gpd) _____

   a. If a continuous discharge: Hours of **Manufacturing Process Discharge** (e.g., 9 a.m. to 5 p.m. or closed)

   M _____ T _____
   W _____ T _____
   F _____ Sa _____
   Su _____

   b. Peak hourly flow rate (gal/hour): _____
   c. Maximum daily flow rate (gal/day) _____
   d. Daily average flow rate (gal/day) _____

   If batch discharge occurs or will occur, indicate:

   e. If batch discharges occur, give the number of occurrences:
      1. Daily _____
      2. Weekly _____
      3. Monthly _____

   f. Time of batch discharges (e.g. 9 a.m. to 10 a.m.)
      1. _____
      2. _____
      3. _____

   g. Average discharge volume per batch: _____ (gal/batch)
   h. Average flow rate per batch: _____ (gal/minute)

City of Carrollton

Topic Discussion Outline

Surcharge

Exceedance of COD, BOD, and TSS levels

SNC Calculation

When is an industry considered SNC?

Streamlining Updates

Updates on TRA and TCEQ streamlining proposal

City of Carrollton

Surcharge Calculations

Q	Wastewater flow, Mgal/mo
0.001	Conversion factor, Mgal/mo to Mmgal/mo
8.34	Conservation factor, mg/L to lb/MMgal
*a**	$/ lb BOD or COD unit charge = 0.09237
*b**	$/ lb TSS unit charge = 0.13058
c	CoC admin overhead factor = 1.3

* Unit charges dictated by TRA and changes every permit year

BOD- Biological oxygen demand
COD- Chemical oxygen demand
TSS- Total suspended solids

$$Surcharge = (Q)\{(0.001)(8.34)[a(BOD - 250) + b(TSS - 250)](c)\}$$

OR

$$Surcharge = (Q)\{(0.001)(8.34)[a(COD - 625) + b(TSS - 250)](c)\}$$

COD is NOT 2.5 times greater than average BOD. Therefore, do not use it in calculation.

BOD is greater than 250.
TSS is greater than 250.
Both will be included in calculation.

Surcharge =	(Q) {Surcharge Multiplier}	
Surcharge =	(Q) {(0.001) (8.34) [a(BOD-250) + b(TSS-250)] (c)}	
	or	
Surcharge =	(Q) {(0.001) (8.34) [a(COD-625) + b(TSS-250)] (c)}	
Q	Wastewater Flow, Mgal/mo	
0.001	Conversion Factor, Mgal/mo to MMgal/mo	
8.34	Conversion Factor, mg/L to lb/MMgal	
0.08162	a = $/lb BOD or COD Unit Charge	
0.12381	b = $/lb TSS Unit Charge	
1.3	c = CoC Admin Overhead Factor	
COD	Averaged from Sample Testing	625
BOD	Averaged from Sample Testing	250
TSS	Averaged from Sample Testing	250

Date	COD (mg/L)	BOD (mg/L)	TSS (mg/L)	Data
1/21/20	3050	1090	590	City
04/14/2020	5820	3870	2080	City
AVERAGES:	4435.00	2480.00	1335.00	

BOD/TSS:

Surcharge = (Q) {(0.001) (8.34) [0.08162*(2480.00-250) + 0.12381*(1335.00-250)] (1.3)}

3.430

COD/TSS:

Surcharge = (Q) {(0.001) (8.34) [0.08162*(4435.00-625) + 0.12381*(1335.00-250)] (1.3)}

4.828

COD is NOT 2.5 times the BOD. Therefore, COD will not be used in calculation.

BOD is greater than 250.
TSS is NOT greater than 250.
Only BOD will be included in calculation.

Surcharge =	(Q) {Surcharge Multiplier}	
Surcharge =	(Q) {(0.001) (8.34) [a(BOD-250) + b(TSS-250)] (c)}	
	or	
Surcharge =	(Q) {(0.001) (8.34) [a(COD-625) + b(TSS-250)] (c)}	

Q	Wastewater Flow, Mgal/mo	
0.001	Conversion Factor, Mgal/mo to MMgal/mo	
8.34	Conversion Factor, mg/L to lb/MMgal	
0.08162	a = $/lb BOD or COD Unit Charge	
0.12381	b = $/lb TSS Unit Charge	
1.3	c = CoC Admin Overhead Factor	
COD	Averaged from Sample Testing	625
BOD	Averaged from Sample Testing	250
TSS	Averaged from Sample Testing	250

Date	COD (mg/L)	BOD (mg/L)	TSS (mg/L)	Data
2/20/20	892	540	202	City
05/27/2020	1020	872	174	City
AVERAGES:	956.00	706.00	188.00	

BOD/TSS:

Surcharge = (Q) {(0.001) (8.34) [0.08162*(706.00-250)] (1.3)}

0.404

COD/TSS:

Surcharge = (Q) {(0.001) (8.34) [0.08162*(956.00-625)] (1.3)}

0.293

COD IS 2.5 times the BOD. However, it is NOT greater than 625 mg/L. Therefore, it will not be used in calculation.

BOD is NOT greater than 250 mg/L.

TSS IS greater than 250 mg/L and will be included in calculation.

Surcharge =	(Q) {Surcharge Multiplier}		
Surcharge =	(Q) {(0.001) (8.34) [a(BOD-250) + b(TSS-250)] (c)}		
	or		
Surcharge =	(Q) {(0.001) (8.34) [a(COD-625) + b(TSS-250)] (c)}		
Q	Wastewater Flow, Mgal/mo		
0.001	Conversion Factor, Mgal/mo to MMgal/mo		
8.34	Conversion Factor, mg/L to lb/MMgal		
0.08162	a = $/lb BOD or COD Unit Charge		
0.12381	b = $/lb TSS Unit Charge		
1.3	c = CoC Admin Overhead Factor		
COD	Averaged from Sample Testing	625	
BOD	Averaged from Sample Testing	250	
TSS	Averaged from Sample Testing	250	

Date	COD (mg/L)	BOD (mg/L)	TSS (mg/L)	Data
12/19/19	652	55	1,120	City
03/19/2020	552	272	151	City
AVERAGES:	602.00	163.50	635.50	

BOD/TSS:

Surcharge = (Q) {(0.001) (8.34) [0.12381*(635.50-250)] (1.3)}

0.517

COD/TSS:

Surcharge = (Q) {(0.001) (8.34) [0.12381*(635.50-250)] (1.3)}

0.517

COD IS 2.5 times greater than BOD and greater than 625 mg/L.

BOD IS greater than 250 mg/L.

TSS IS greater than 250 mg/L.

COD and TSS will all be used in the calculations.

Q	Wastewater Flow, Mgal/mo	
0.001	Conversion Factor, Mgal/mo to MMgal/mo	
8.34	Conversion Factor, mg/L to lb/MMgal	
0.08162	a = $/lb BOD or COD Unit Charge	
0.12381	b = $/lb TSS Unit Charge	
1.3	c = CoC Admin Overhead Factor	
COD	Averaged from Sample Testing	625
BOD	Averaged from Sample Testing	250
TSS	Averaged from Sample Testing	250

Date	COD (mg/L)	BOD (mg/L)	TSS (mg/L)	Data
12/20/19	74	23	148	City
03/19/2020	2480	763	775	City
AVERAGES:	1277.00	393.00	461.50	

BOD/TSS:

Surcharge = (Q) {(0.001) (8.34) [0.08162*(393.00-250) + 0.12381*(461.50-250)] (1.3)}

0.410

COD/TSS:

Surcharge = (Q) {(0.001) (8.34) [0.08162*(1277.00-625) + 0.12381*(461.50-250)] (1.3)}

0.861

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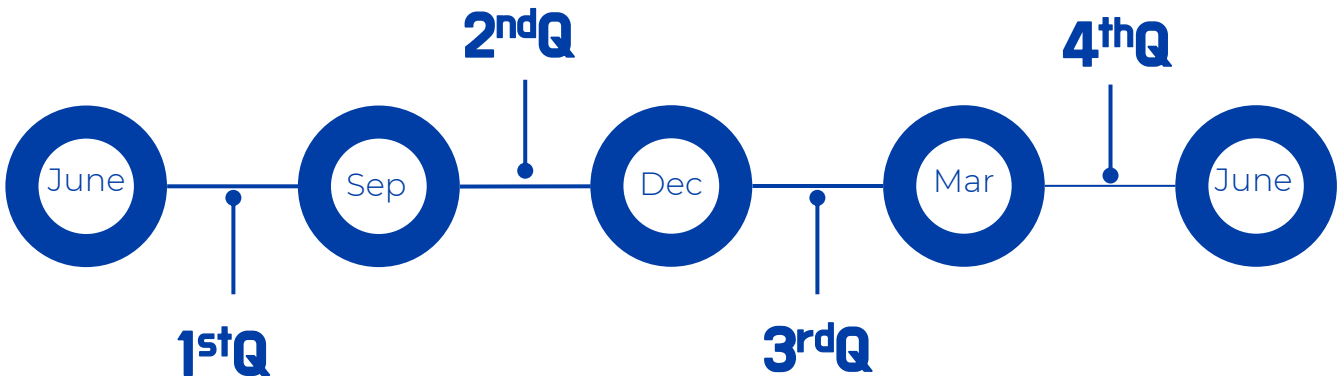
Significant Non Compliance Schedule



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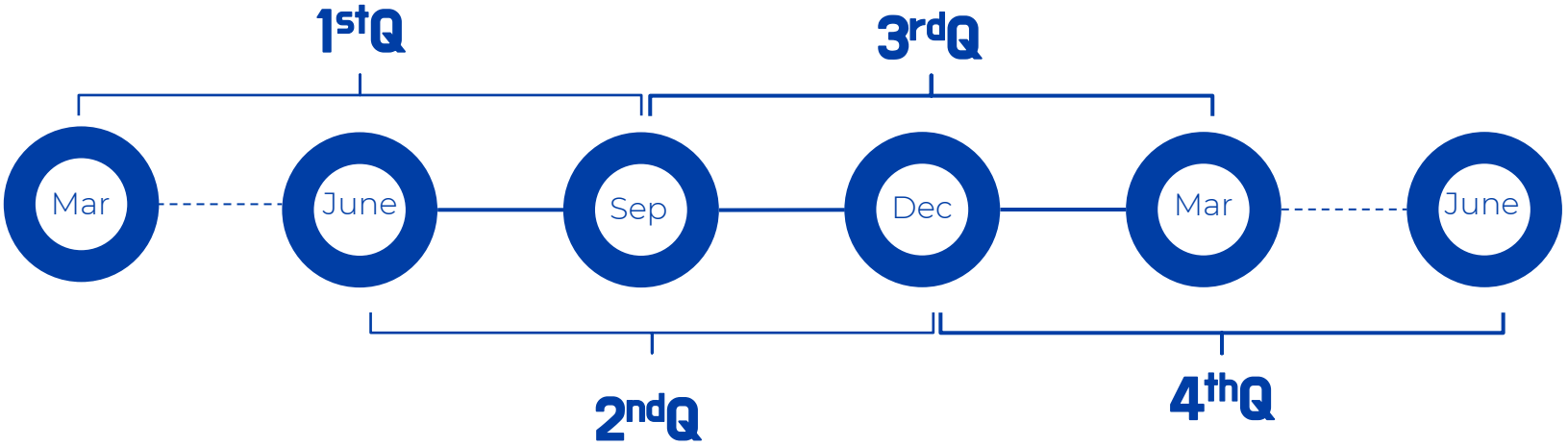
Significant Non Compliance Schedule



Rolling Quarters

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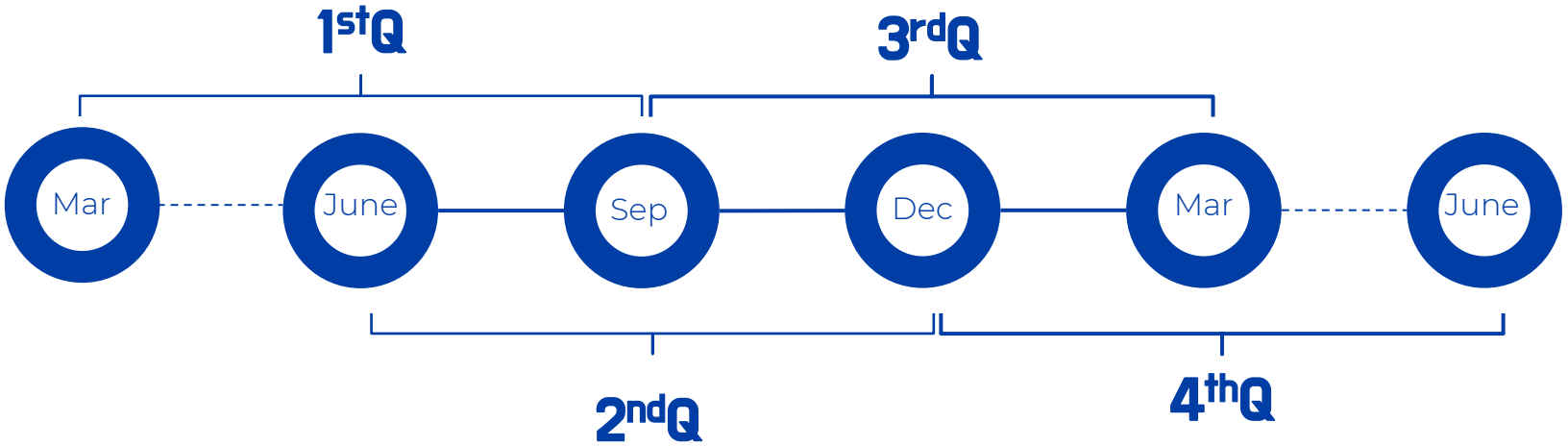

- Chronic Effluent Violations: Violations as those in which 66% or more of all measurements taken during a six-month window exceed the daily maximum or the average limit for the same pollutant parameter

- Technical Review Violations: Violations in which 33% or more of all measurements taken during a six-month window exceed the product of the daily maximum limit or the average limit multiplied by applicable TRC (1.2) (ex. Permit limit of 2.0 x 1.2= 2.4)

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Significant Non Compliance

	Sample Date	Result(mg/L)	Permit Limit (mg/L)	Technical Review Criteria(mg/L)	Violation of Limit	Violation of TRC
1stQ	5/6/21	1.7	2.0	2.4	No	No
	7/5/21	1.2	2.0	2.4	No	No
	8/6/21	2.2	2.0	2.4	Yes	No
2ndQ	9/5/21	1.5	2.0	2.4	No	No
	10/9/21	3.3	2.0	2.4	Yes	Yes
	12/7/21	2.7	2.0	2.4	Yes	Yes

- 1st quarter: March- August
  No SNC
- 2nd quarter: June - November
  TRC violation

Example

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Sampling Parameters

- All local limits must be sampled at least once per permit cycle
- Categorical limits are sampled at least semiannually
- Surcharge parameters (COD, BOD, TSS) sampled semiannualy or quarterly depending on trends.

- Must resample within 30 days of an exceedance. Highly recommend sampling 3 times in order to stay out of SNC.
- If Industry identified the exceedance, the SIU/IU must notify the POTW within 24 hours of becoming aware of the violation.

Example

City of Carrollton

Streamlining Updates

Slug control plan, SNC, best management practices

Topic Discussion

Slug control plan

- Slug control plans must be specified for the SIU's permit
- SIU 's must notify the POTW of any changes at their facility affecting the potential for a slug discharge.
- Slug control plans will be evaluated annually

Significant Noncomplaince

- Definition has been expanded to include additional types of Pretreatment Standards and Requirements
- 40 CFR 403.8(f)(2)(viii)(H) Any other violation or group of violation, **which may include a violation of Best Management Practices**, which the POTW determines will adversely affect the operation or implementation of the local Pretreatment program.

Best Management Practices

- Permits must contain any BMPs required by a Pretreatment Standard, local limit, state, or local law.
    - TOMPs
    - Slug Control Plans
    - Pollution Prevention Plan
- SIUs **and POTWs** are required to maintain BMP documentation for three (3) years.

Stormwater Do's and Don'ts

Thanks!

Do you have any questions?

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