

# WHOLESALE DISCHARGE PERMIT

**TO: CITY OF TERRYTOWN**

received  
 12/30/2022

Pursuant to the Scottsbluff Municipal Code, you are granted this permit to discharge industrial waste into the sanitary sewer of the City of Scottsbluff.

This permit is effective January 1, 2023 and will be valid until December 31, 2023 at 11:59 p.m., unless sooner revoked.

This permit is subject to your compliance with applicable provisions of the Scottsbluff Municipal Code presently in force and as subsequently amended, and with all conditions of this permit.

This permit is not transferable, and is subject to revocation as provided in the Scottsbluff Municipal Code.

The City Manager shall be immediately notified of any introduction of a new waste water constituent or any substantial change in the volume or character of the waste water being introduced into the City's sanitary sewer.

In addition to the provision of the Scottsbluff Municipal Code, this permit is subject to the following special conditions.

**Part I: WASTEWATER DISCHARGE LIMITATION AND MONITORING REQUIREMENTS**

During the period beginning January 1, 2023 and lasting through December 31, 2023, the permittee is authorized to discharge industrial wastewater in accordance with the following effluent discharge limitation and monitoring requirements:

Parameter	Discharge Limitations		Monitoring Requirements	
	30 Day Average	Permit Maximum	Measurement Frequency	Sample Type
Flow	---GPD	4.848 MG/Month	Daily	By meter
pH	In range of 5.5 to 9.0 at all times.		1/Month	Grab
Temperature	-----	150 degrees F	1/Month	Grab
Oil and Grease	50 mg/l	50 mg/l	1/Month	Grab or Composite
BOD (5 Day)	--- mg/l	404 lbs/day	2/Month	Composite
NH3	--- mg/l	25 mg/l	2/Month	Composite
Total Suspended Solids	--- mg/l	472 lbs/day	2/Month	Composite
Total Volatiles	N/A	N/A	N/A	N/A
Total Semivolatiles	N/A	N/A	N/A	N/A

All terms used in this permit shall bear the meaning given in the Scottsbluff Municipal Code. If a term is not defined in the Scottsbluff Municipal Code, it shall bear the meaning given it in the most current edition of Standard Methods.

All Averages are based on 30 days per month.

All laboratory analysis of parameters to be tested by the permittee shall be in accordance with the most current addition of Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Associations. All samples shall be taken from the effluent sampling station, sampling duration shall conform with hours of operation if less than 24 hours. Biochemical Oxygen Demand (BOD) values in excess of 300 mg/l, Total Suspended Solids (TSS) values in excess of 350 mg/l may be subject to an industrial surcharge billing, in accordance with Section 18-4-9 Surcharge, and Section 6-6-22 Surcharge, which establishes fees for the provision of 18-4-9 of the Scottsbluff Municipal Code.

All values shall be established by the City during periods of compliance monitoring.

## Part II: Other Requirements

All self-monitoring sampling results shall be submitted to the Scottsbluff Wastewater Treatment Plant by the 5<sup>th</sup> day of the month following the month of sampling. These should be submitted to:

City of Scottsbluff  
Wastewater Treatment Plant  
2525 Circle Drive  
Scottsbluff, NE 69361  
Attention: Lynn Garton, Wastewater Supervisor

If there are any violations to the permit conditions set forth herein, an explanation shall be submitted explaining the reasons why and what steps are proposed and/or are being taken to prevent their occurrence.

Any discharge of wastes prohibited under Section 18-3-2 of the Scottsbluff Municipal Code shall be reported to the Scottsbluff Wastewater Plant by the quickest means available. Information shall be furnished that characterizes the discharge such that the Scottsbluff Wastewater System can take proper action to protect the public, the wastewater collection system and the receiving treatment plant, which may be endangered by such discharge.

If permit limits are exceeded the permittee may be required to install the appropriate pretreatment equipment to maintain the required effluent limitations.

If permittee's flows and sampling results are not consistent with the city's comparative testing, the permittee will be required to have a state certified operator in responsible charge of all permit requirements and pretreatment equipment.

DATE: 12-9-22

City of Scottsbluff, NE

  
Authorized Representative

## Base Formula to Set Permit Limits

The following formula is used to set permit limits.

1. The permit will be issued, based on data from October of the previous year through September of the current year (12 months), from this the following information is determined.

### **Calculating new permit for Flow:**

1. Calculate the total gallons for the period stated above.
2. Divide total gallons by the number of months to find gallons. (This equals average gallons / month)
3. Divide average gallon / month by 30 days (average days/month) to find average gallons/day
4. Take the average gallons / day times 1.50 variable for (future expansion), which will give you a gallons / day figure.
5. Take the gallons /day (from #4) times 1.25 for (peak flows). Which equals final gallons/day, this number you will use to calculate the pounds (lbs.) formula for BOD and Total Suspended Solids
6. Then take your final gallons /day times 30 day per month. This equals your Maximum gallons on the Industrial permit.

### **Calculating new permit for BOD, lbs:**

1. Calculate the total BOD, mg/l for the period stated above.
2. Divide the total BOD, mg/l by the number of months (12) to find the BOD, mg/l / average month)
3. Take the average BOD, mg/l times X 1.50 variable for (future expansion). This equals the BOD, mg/l average, which you use in your lbs. formula.
4. Take the flow calculation, which was calculated in #5 above times the BOD, mg/l average times 8.34 (constant).
5. This equals the BOD maximum lbs. / day. This number is the max. BOD /lbs. limit on the Industrial permit.

### **Calculating new permit for Total Suspended Solids, lbs:**

1. Calculate the Total Suspended Solids, mg/l for the period stated above.
2. Divide the Total Suspended Solids, mg/l by the number of months (12) to find the TSS, mg/l / average month)
3. Take the average Total Suspended Solids, mg/l times X 1.50 variable for (future expansion). This equals the TSS, mg/l average, which you use in your lbs. formula.
4. Take the flow calculation, which was calculated in #5 above times the TSS, mg/l average times 8.34 (constant).
5. This equals the Total Suspended Solids maximum lbs. / day. This number is the max. TSS / lbs. limit on the Industrial permit.

# Yearly Sample and Discharge History

City of Terrytown

Year: 2022

Month	BOD mg/l	TSS mg/l	Flow
October	147.50	109.15	2,495,000
November	147.50	73.30	2,334,000
December	164.50	62.00	2,705,000
January	143.00	70.00	2,624,000
February	162.00	80.70	2,366,000
March	133.00	53.30	3,061,000
April	166.00	202.00	2,227,000
May	160.00	62.85	2,356,000
June	160.50	67.85	2,594,000
July	138.00	61.00	2,731,000
August	115.00	38.65	2,685,000
September	118.00	40.85	2,849,000
Total	1,755.00	921.65	31,027,000
Maximum	166.00	202.00	3,061,000
Average	146.25	76.80	2,585,583

## Permit Flow Calculations

2,585,583 Avg gal/Day divided by 30 days =	86,186 Avg gal/Day
86,186 Avg gal/Day x 1.50 (Future Exp.) =	129,279 Gal/Day
129,279 x 1.25 (Peak Flow) =	161,599 Gal/Day
161,599 x 30 Day =	4,847,969 Max. gal/Month

## Permit B.O.D. Lbs/Day Calculations

146.25 Avg BOD mg/L x 1.50 (Future Expansion) =	219.38 mg/L
300.00 mg/L x .161599 x 8.34 =	404.3 BOD Lbs/Day Max.

## Permit T.S.S. Lbs/Day Calculations

76.80 Avg TSS mg/L x 1.50 (Future Expansion) =	115.21 mg/L
350.00 mg/L x .161599 x 8.34 =	471.7 TSS Lbs/Day Max.

\*If Average mg/L is below surcharge limits, surcharge limits are used to establish permit limits. BOD 300 TSS 350

# Memo

received  
12/12/2022

**Date:** December 12, 2022  
**To:** City of Terrytown  
**From:** Lynn Garton, Wastewater Supervisor  
**Re:** Annual Discharge Permit Renewal

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Enclosed please find the annual renewal of the discharge permit for City of Terrytown. As usual, the permit maximums have been based off prior year figures; however, the general terms and conditions remain the same. If you have any questions, please don't hesitate to call me at 308-630-6292.