

RECEIVED

OCT - 5 2021

CITY OF KNOXVILLE

BOCK INC.
MONTHLY REPORT FOR
SEPTEMBER, 2021

SUBMITTED BY: _____

SB

September, 2021

IEPA SUMMARY

There were no communications with IEPA.

MAINTENANCE SUMMARY

BOCK Inc. performed preventive maintenance at the plant.

SAFETY

Because safety is an important part of our daily practice, we have been without a loss time injury at the plant for 241 months.

OPERATIONS SUMMARY

Influent flow averaged 387,763 gallons per day.

Electricity used totaled 49,536 kilowatt hours.

Rainfall totaled 1.12 inches.

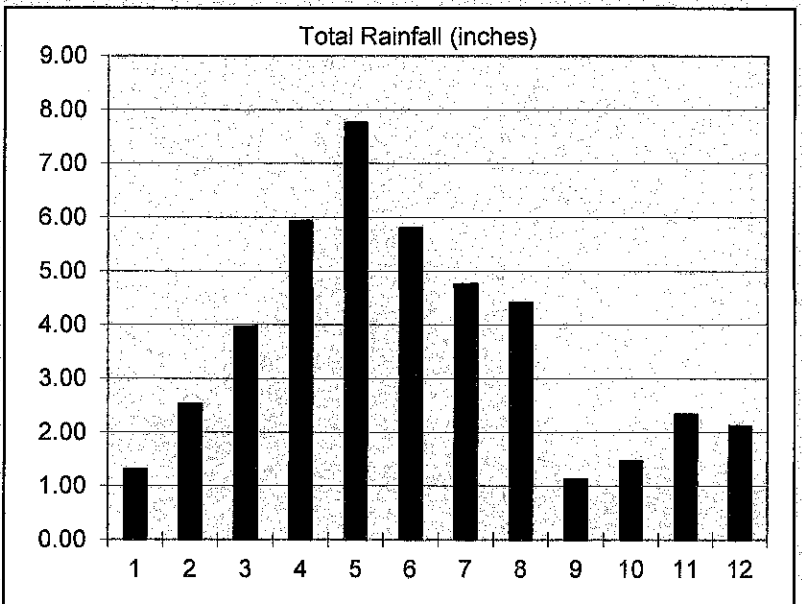
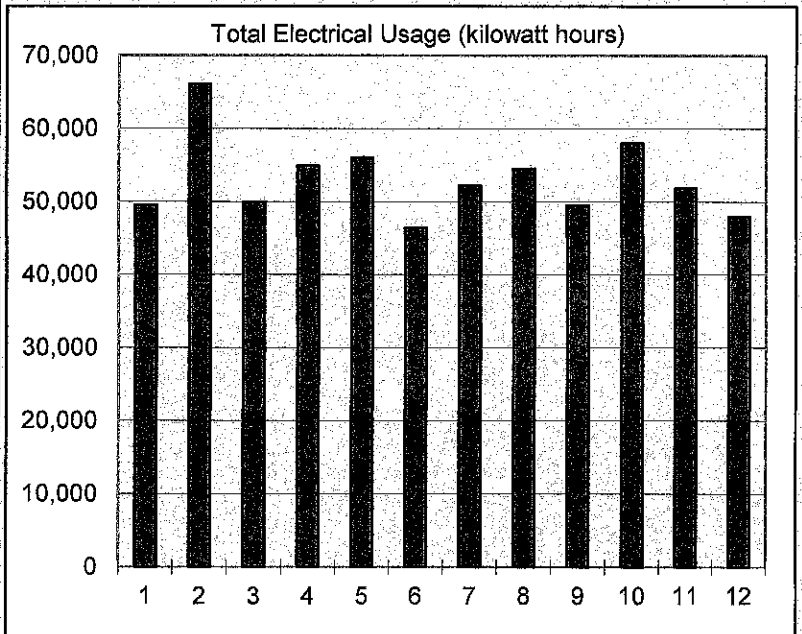
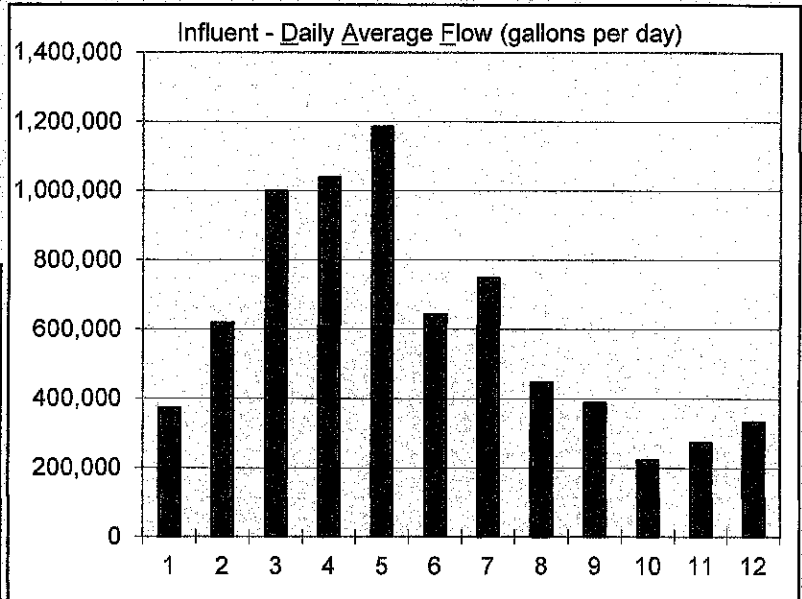
Dewatered sludge disposed of to the Knox County landfill totaled 0 tons.

Knoxville, Illinois
Wastewater Treatment Plant
Twelve Month Moving Average Report
Submitted by
Bock Inc.

	Date	Influent - Daily Average Flow (gallons per day)	Total Electrical Usage (kilowatt hours)	Total Rainfall (inches)
1	January 2021	371,835	49,536	1.30
2	February 2021	619,146	66,048	2.52
3	March 2021	999,616	49,920	3.96
4	April 2021	1,038,277	54,912	5.93
5	May 2021	1,185,761	56,064	7.76
6	June 2021	643,937	46,464	5.80
7	July 2021	747,877	52,224	4.76
8	August 2021	446,345	54,528	4.41
9	September 2021	387,763	49,536	1.12
10	October 2020	221,852	57,984	1.46
11	November 2020	272,640	51,840	2.33
12	December 2020	333,187	48,000	2.12
Total		7,268,236	637,056	43.47
Average		1,118,190	98,009	3.62

Plant Design Average Flow is
660,000 gallons per day

Plant Design Maximum Flow is
1,650,000 gallons per day



Knoxville, Illinois Wastewater Treatment Plant
 Operated by Bock Inc.
 Monthly Report September, 2021

Date	Influent Flow (mgd)	RAS Flow (mgd)	WAS Flow (mgd)	Influent TSS (mg/l)	B01 TSS (mg/l)	TSS % Removal (mg/l)	Influent TSS (lbs/day)	B01 TSS (lbs/day)	% Removal (lbs/day)	Outfall B01				
										pH (std. units)	D.O. (mg/l)	NH3 as (N) (mg/l)	NH3 as (N) (lbs/day)	Fecal Coliform (cfu/100)
9/1/2021	0.899500	0.269900	0.000000											
9/2/2021	0.564800	0.169400	0.019006											
9/3/2021	0.488600	0.146600	0.000000											
9/4/2021	0.469600	0.140900	0.000000											
9/5/2021	0.391100	0.117300	0.008840											
9/6/2021	0.403900	0.121200	0.000000											
9/7/2021	0.377400	0.113200	0.016354											
9/8/2021	0.343800	0.103100	0.010608											
9/9/2021	0.328500	0.098600	0.009282											
9/10/2021	0.313000	0.093900	0.010608											
9/11/2021	0.296300	0.088900	0.000000											
9/12/2021	0.297100	0.089100	0.008840											
9/13/2021	0.284400	0.085300	0.000000	222.0	6.0	97.3	527	14.2	97.3	7.44	5.89	0.100	0.2	2,420
9/14/2021	0.260400	0.078100	0.000000											
9/15/2021	0.262300	0.078700	0.009724											
9/16/2021	0.250500	0.752000	0.015470											
9/17/2021	0.253700	0.761000	0.009280											
9/18/2021	0.235000	0.070500	0.000000											
9/19/2021	0.252900	0.075900	0.008840											
9/20/2021	0.501000	0.150300	0.000000											
9/21/2021	0.600600	0.180200	0.000000	274.0	4.2	98.5	1,372	21.0	98.5	6.96	5.80	0.100	0.5	2,420
9/22/2021	0.395600	0.118700	0.019448											
9/23/2021	0.312700	0.093800	0.013260											
9/24/2021	1.294600	0.388400	0.009282											
9/25/2021	0.286100	0.085800	0.008840											
9/26/2021	0.289300	0.086800	0.008840											
9/27/2021	0.264400	0.079300	0.000000											
9/28/2021	0.246800	0.074000	0.000000											
9/29/2021	0.241200	0.072400	0.013260											
9/30/2021	0.227800	0.068300	0.008840											
Minimum	0.227800	0.068300	0.000000	222.0	4.2	97.3	527	14.2	97.3	6.96	5.80	<0.100	0.2	2,420
Maximum	1.294600	0.761000	0.019448	274.0	6.0	98.5	1,372	21.0	98.5	7.44	5.89	<0.100	0.5	2,420
Total	11.632900	4.851600	0.208622	496	10.2	196	1,899	35.3	196	14.4	11.7	0.200	0.7	4,840
Average	0.387763	0.161720	0.006954	248.0	5.1	97.9	950	17.6	97.9	7.20	5.85	0.100	0.4	2,420

Knoxville, Illinois Wastewater Treatment Plant
 Operated by Bock Inc.
 Monthly Report for September, 2021

Date	Influent BOD (mg/l)	B01 CBOD (mg/l)	BOD % Removal (mg/l)	Influent BOD (lbs/day)	B01 CBOD (lbs/day)	BOD % Removal (lbs/day)	Electrical Usage (kwh's)	High Temperature (degrees F)	Low Temperature (degrees F)	Rainfall (inches)	Snowfall (inches)
9/1/2021							1,920	78.7	55.2		
9/2/2021							1,536	76.7	58.4		
9/3/2021							1,920	71.9	61.8	0.07	
9/4/2021							1,920	71.8	57.2		
9/5/2021							1,536	79.3	61.7		
9/6/2021							1,536	84.0	64.1		
9/7/2021							1,536	85.4	59.3		
9/8/2021							1,920	77.6	52.5		
9/9/2021							1,536	75.5	52.6		
9/10/2021							1,536	80.4	55.0		
9/11/2021							1,536	85.3	66.3		
9/12/2021							1,536	85.2	66.4		
9/13/2021	200.0	4.40	97.8	474	10.4	97.8	1,536	84.8	66.5		
9/14/2021							1,920	82.4	54.7		
9/15/2021							1,536	78.2	53.3		
9/16/2021							1,536	81.7	54.1		
9/17/2021							1,920	87.5	58.0		
9/18/2021							1,536	85.9	62.7		
9/19/2021							1,536	87.7	66.7		
9/20/2021							1,536	84.5	58.6	1.05	
9/21/2021	86.0	<4.00	95.3	431	20.0	95.3	1,920	70.2	51.7		
9/22/2021							1,536	68.5	43.3		
9/23/2021							1,920	70.8	46.6		
9/24/2021							1,536	79.3	48.2		
9/25/2021							1,920	69.8	50.3		
9/26/2021							1,536	84.3	53.9		
9/27/2021							1,536	86.3	58.3		
9/28/2021							1,536	84.3	57.0		
9/29/2021							1,536	86.4	58.4		
9/30/2021							1,536	86.7	59.8		
Minimum	86.0	<4.00	95.3	431	10.4	95.3	1,536	68.5	43.3	0.07	
Maximum	200.0	4.40	97.8	474	20.0	97.8	1,920	87.7	66.7	1.05	
Total	286.0	8.40	193.1	905	30.5	193.1	49,536	2,411	1,713	1.12	
Average	143.0	4.20	96.6	453	15.2	96.6	1,651	80.4	57.1	0.56	

Knoxville, Illinois Wastewater Treatment Plant
 Operated by Bock Inc.
 Monthly Report for September, 2021
 Outfall A01
 Excess Flow Discharge

Date	BOD (mg/l)	TSS (mg/l)	NH3 (as N) (mg/l)	Fecal Coliform (cfu's/100ml)	Flow (mgd)
9/1/2021					0.000000
9/2/2021					0.000000
9/3/2021					0.000000
9/4/2021					0.000000
9/5/2021					0.000000
9/6/2021					0.000000
9/7/2021					0.000000
9/8/2021					0.000000
9/9/2021					0.000000
9/10/2021					0.000000
9/11/2021					0.000000
9/12/2021					0.000000
9/13/2021					0.000000
9/14/2021					0.000000
9/15/2021					0.000000
9/16/2021					0.000000
9/17/2021					0.000000
9/18/2021					0.000000
9/19/2021					0.000000
9/20/2021					0.000000
9/21/2021					0.000000
9/22/2021					0.000000
9/23/2021					0.000000
9/24/2021					0.000000
9/25/2021					0.000000
9/26/2021					0.000000
9/27/2021					0.000000
9/28/2021					0.000000
9/29/2021					0.000000
9/30/2021					0.000000
Minimum					0.000000
Maximum					0.000000
Total					0.000000
Average					0.000000

Knoxville, Illinois Wastewater Treatment Plant
 Operated by Bock Inc.
 Monthly Report for September, 2021
 Outfall 001
 Excess Flow Discharge

Date	D.O. (mg/L)	BOD (mg/L)	pH (Std.Units)	TSS (mg/L)	NH3 (as N) (mg/L)	CL2 Residual (mg/L)	Flow (mgd)
09/01/21							0.000000
09/02/21							0.000000
09/03/21							0.000000
09/04/21							0.000000
09/05/21							0.000000
09/06/21							0.000000
09/07/21							0.000000
09/08/21							0.000000
09/09/21							0.000000
09/10/21							0.000000
09/11/21							0.000000
09/12/21							0.000000
09/13/21							0.000000
09/14/21							0.000000
09/15/21							0.000000
09/16/21							0.000000
09/17/21							0.000000
09/18/21							0.000000
09/19/21							0.000000
09/20/21							0.000000
09/21/21							0.000000
09/22/21							0.000000
09/23/21							0.000000
09/24/21							0.000000
09/25/21							0.000000
09/26/21							0.000000
09/27/21							0.000000
09/28/21							0.000000
09/29/21							0.000000
09/30/21							0.000000
Minimum							0.000000
Maximun							0.000000
Total							0.000000
Average							0.000000

DMR Copy of Record

Permit Permit #: IL0022209 Major: No	Permittee: KNOXVILLE, CITY OF 33 NORTH SIDE PUBLIC SQUARE KNOXVILLE, IL 61448	Facility: KNOXVILLE STP 507 SOUTH DIVISION STREET KNOXVILLE, IL 61448
Permitted Feature: INF Influent Structure	Discharge: INF-L INFLUENT MONITORING	
Report Dates & Status Monitoring Period: From 09/01/21 to 09/30/21	DMR Due Date: 10/25/21	Status: NetDMR Validated
Considerations for Form Completion BOW ID: W0350300002		
Principal Executive Officer First Name: Stanley Last Name: Bookwitz	Title: Chief Operator	Telephone: 309-852-2759
No Data Indicator (NODI) Form NODI:		
Transfer: Name	Monitoring Location	Session # Param. NODI
00310 BOD, 5-day, 20 deg. C	G - Raw Sewage Influent	0
00530 Solids, total suspended	G - Raw Sewage Influent	0
50050 Flow, in conduit or thru treatment plant	G - Raw Sewage Influent	0

Code	Qualifier 1	Qualifier 2	Value 1	Value 2	Units	Qualifier 1 Value 1	Qualifier 2 Value 2	Quality or Contamination	Value 1	Value 2	Units	# of Ex.	Frequency of Analysis	Sample Type
00310								Req Min MO AVG	143.0		19 - mg/L	0	0309 - See Permit 0309 - See Permit	CP - COMPOS CP - COMPOS
00530								Req Min MO AVG	218.0		19 - mg/L	0	0309 - See Permit 0309 - See Permit	CP - COMPOS CP - COMPOS
50050								Req Min DAILY MX 03 - MCD	1.246		03 - MCD	0	0309 - Confined 0309 - Confined	

Submission Note
If a parameter row does not contain any values for the Sample or Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments
No attachments.

Report Last Saved By

KNOXVILLE, CITY OF

User:

Name:

E-Mail:

Date/Time:

Report Last Signed By

User:

Name:

E-Mail:

Date/Time:

bookinc1992
Stanley Bookwitz
stanb@bookinc.net
2021-10-04 14:04 (Time Zone: -05:00)
bookinc1992
Stanley Bookwitz
stanb@bookinc.net
2021-10-04 14:15 (Time Zone: -05:00)

DMR Copy of Record

Permit #: 1L0022209	Permittee: KNOXVILLE CITY OF	Facility: KNOXVILLE STP
Major: No	Permittee Address: 33 NORTH SIDE PUBLIC SQUARE KNOXVILLE, IL 61443	Facility Location: 507 SOUTH DIVISION STREET KNOXVILLE, IL 61443
Permitted Feature: B01 - Internal Outfall	Discharge: B01-0 STP INTERNAL OUTFALL	
Report Dates & Status:	DMR Due Date: 10/25/21	Status: NotDMR Validated
Monitoring Period: From 08/01/21 to 09/30/21		
Considerations for Form Completion:		
BOW ID: W035030002		
Principal Executive Officer:	Title: Chief Operator	Telephone: 309-852-2789
First Name: Stanley		
Last Name: Bockwitz		
No Data Indicator (NODI):		

Code	Parameter Name	Monitoring Location	Session #	Param. NODI	Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 3	Value 3	Units	# of Ex	Frequency of Analysis	Sample Type
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	1	-	Sample Permit Rec Value NODI									0220 - Twice Per Month	CP - COMPOS
00400	pH	1 - Effluent Gross	0	-	Sample Permit Rec Value NODI									0230 - Twice Per Month	CP - COMPOS
00530	Solids, total suspended	1 - Effluent Gross	0	-	Sample Permit Rec Value NODI									0230 - Twice Per Month	CP - COMPOS
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	-	Sample Permit Rec Value NODI									0230 - Twice Per Month	CP - COMPOS
00610	Nitrogen, ammonia total [as N]	8 - Other Treatment, Process Complete	0	-	Sample Permit Rec Value NODI									0230 - Twice Per Month	CP - COMPOS
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	-	Sample Permit Rec Value NODI									0230 - Twice Per Month	CP - COMPOS
50060	Chlorine, total residual	1 - Effluent Gross	0	-	Sample Permit Rec Value NODI									0230 - Twice Per Month	CP - COMPOS
74055	Calcium, total	1 - Effluent Gross	0	-	Sample Permit Rec Value NODI									0230 - Twice Per Month	CP - COMPOS
80032	BOD, carbonaceous [5 day, 20 °C]	1 - Effluent Gross	0	-	Sample Permit Rec Value NODI									0230 - Twice Per Month	CP - COMPOS

Submission Note
If a parameter row does not contain any values for the Sample No, Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
No errors.

Comments
Chlorination did not occur during this monitoring period.

Attachments
No attachments.

Report Last Saved By
KNOXVILLE, CITY OF

User: bockwitz1992

Name:

E-Mail:

Date/Time:

Report Last Signed By

User:

Name:

E-Mail:

Date/Time:

Stanley Bockwitz

stanb@bockinc.net

2021-10-04 14:11 (Time Zone: -05:00)

bockinc1902

Stanley Bockwitz

stanb@bockinc.net

2021-10-04 14:14 (Time Zone: -05:00)

DMR Copy of Record

Permit #: IL0022209	Permittee: KNOXVILLE, CITY OF	Facility: KNOXVILLE STP
Major: No	Permittee Address: 33 NORTH SIDE PUBLIC SQUARE KNOXVILLE, IL 61448	Facility Location: 507 SOUTH DIVISION STREET KNOXVILLE, IL 61448
Permitted Feature: A01 External Outfall	Discharge: A01-0 EXCESS FLOW	Status: NetDMR Validated
Report Dates & Status: From 09/01/21 to 09/30/21	DMR Due Date: 10/25/21	Telephone: 303-852-2789
Monitoring Period: Considerations for Form Completion	Title: Chief Operator	
Monitoring Period: From 09/01/21 to 09/30/21		
Considerations for Form Completion: BOW ID: W0903030002: NUMBER OF DAYS OF DISCHARGE:		
Principal/Executive Officer: Stanley Bockewitz		
First Name: Stanley		
Last Name: Bockewitz		
No Data Indicator (NODI):		
Form NODI:		

Parameter Name	Monitoring Location	Season	Param. NODI	Sample Permit Req. Value NODI	Quantity or Loading Value 1	Qualifier 1	Units	Quality or Concentration Value 2	Qualifier 2	Units	# of Ex.	Frequency of Analysis	Sample Type
00310 BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	Req Mon MO AVG	C - No Discharge	19 - mg/L	DL/DS	Daily When Discharging	GR - GRAB			
00630 Solids, total suspended	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	Req Mon MO AVG	C - No Discharge	19 - mg/L	DL/DS	Daily When Discharging	GR - GRAB			
00610 Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	Req Mon DAILY MX	C - No Discharge	19 - mg/L	DL/DS	Daily When Discharging	GR - GRAB			
74055 Calcium, fecal general	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	400.0 DAILY MX	C - No Discharge	13 - #/100mL	DL/DS	Daily When Discharging	GR - GRAB			
82220 Flow, total	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	Req Mon MO TOTAL	80 - Mgal/mo		DL/DS	Daily When Discharging	CN - CONTIN			

Submission Note: If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors:

No Errors:

Comments:

Attachments:

No attachments:

Report Last Saved By:

KNOXVILLE, CITY OF

User:

Stanley Bockewitz

Name:

stanb@bockinc.net

E-Mail:

2021-10-04 13:53 (Time Zone: -05:00)

Date/Time:

Report Last Signed By:

Stanley Bockewitz

User:

stanb@bockinc.net

Name:

2021-10-04 14:13 (Time Zone: -05:00)

E-Mail:

Date/Time:

[illegible]

Report Dates & Status

Monitoring Period:	DMR Due Date:	Status:	NetDMR Validated
From 09/01/21 to 09/30/21	10/25/21		

Considerations for Form Completion

Principal Executive Officer

Case Name: **Doonoma**

No Data Indicator (NODI)

Code	Partner	Monitoring Location	Season	Param.	NOI	Quantity or Loading	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units	% of Ex.	Frequency of Analysis	Sample Type
						Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3						

03000	Oxygen, dissolved [DO]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	Req Mon MO AV MIN C - No Discharge	Req Mon DAILY MIN 10 - mg/L C - No Discharge	DL/D5 - Daily When Discharging GR - GRAB
03010	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	<= 30.0 MO AVG C - No Discharge	<= 45.0 WKLY AVG C - No Discharge	DL/D5 - Daily When Discharging GR - GRAB
04000	pH	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	>= 6.0 MIN/MLIM C - No Discharge	<= 5.0 MAXIMUM C - No Discharge	DL/D5 - Daily When Discharging GR - GRAB
05000	Solids, total suspended	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	<= 30.0 MO AVG C - No Discharge	<= 45.0 WKLY AVG C - No Discharge	DL/D5 - Daily When Discharging GR - GRAB
06000	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	Req Mon MO AVG C - No Discharge	Req Mon DAILY MAX 19 - mg/L C - No Discharge	DL/D5 - Daily When Discharging GR - GRAB
06040	Chlorine, total residual	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	<= 0.75 MO AVG C - No Discharge	19 - mg/L C - No Discharge	DL/D5 - Daily When Discharging GR - GRAB
92200	Flow, total	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	Req Mon MO/TOTAL 30 - Mgal/mo C - No Discharge		DL/D5 - Daily When Discharging CN - CONTIN

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

No errors.

100

No attachments.

User:

E-Mail: _____
Date/Time: _____

User:

Name: Stanley Backewitz
E-Mail: stanb@bookinc.net
Date/Time: 2021-10-04 14:12 (Time Zone: -05:00)