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SEP 10 2019

CITY OF KNOXVILLE

BOCK INC.
MONTHLY REPORT FOR
AUGUST, 2019

SUBMITTED BY:

Stanley Bockhart

August, 2019

IEPA SUMMARY

There were no communications with IEPA.

MAINTENANCE SUMMARY

BOCK Inc. performed all preventive maintenance for 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 228 months.

OPERATIONS SUMMARY

Influent flow averaged 230,532 gallons per day.

Electricity used totaled 52,608 kilowatt hours.

Rainfall totaled 2.95 inches.

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

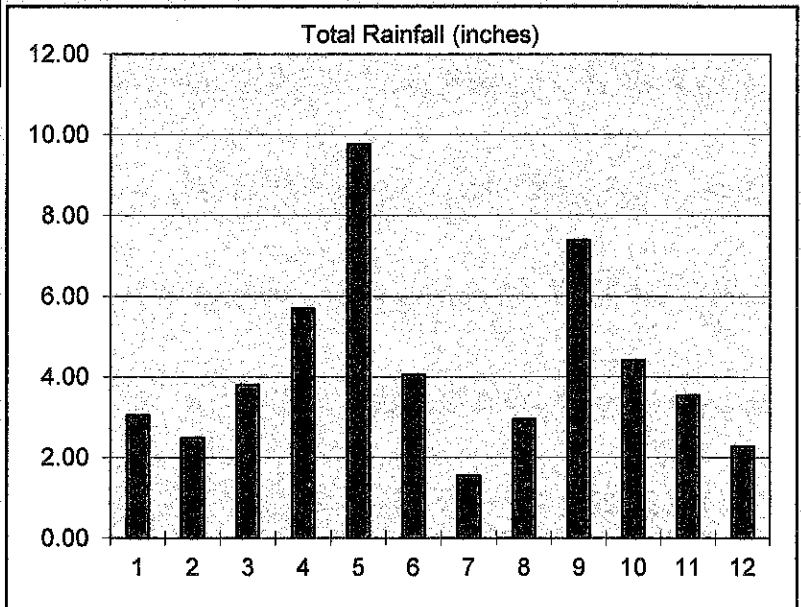
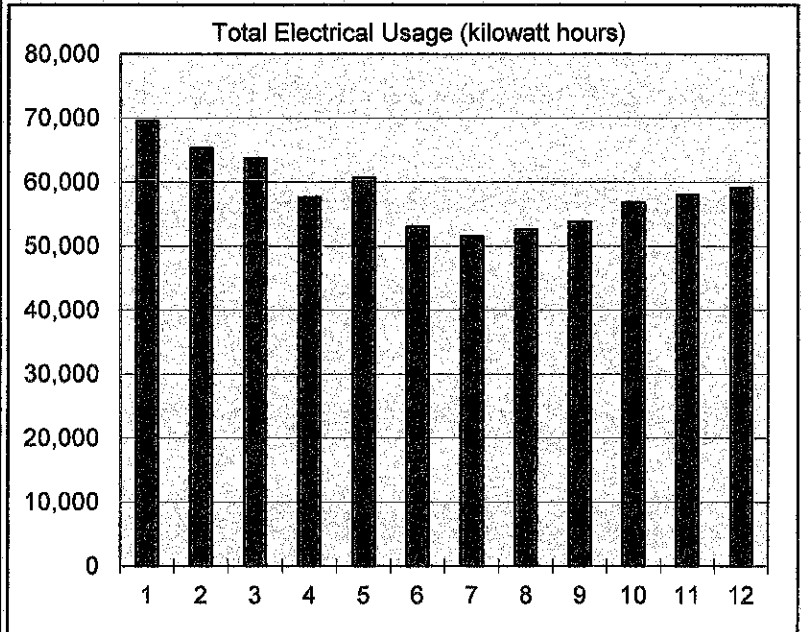
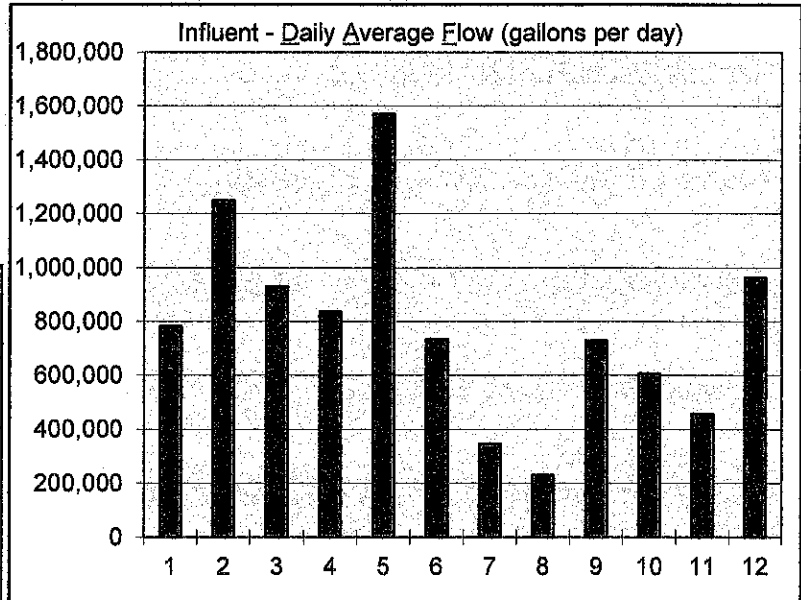
We experienced 0 days of excess flow discharge from outfall A01.

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 2019	782,784	69,504	3.04
2	February 2019	1,247,743	65,280	2.48
3	March 2019	929,884	63,744	3.80
4	April 2019	836,120	57,600	5.69
5	May 2019	1,569,826	60,672	9.76
6	June 2019	734,050	52,992	4.06
7	July 2019	345,574	51,456	1.55
8	August 2019	230,532	52,608	2.95
9	September 2018	728,640	53,760	7.39
10	October 2018	606,726	56,832	4.41
11	November 2018	457,267	57,984	3.55
12	December 2018	963,006	59,136	2.28
Total		9,432,152	701,568	50.96
Average		786,013	58,464	4.25

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 for August, 2019

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)	TSS % 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)	
8/1/2019	0.213500	0.064100	0.004420												
8/2/2019	0.220200	0.066100	0.005304												
8/3/2019	0.215400	0.064600	0.004420												
8/4/2019	0.202700	0.060800	0.004420												
8/5/2019	0.233800	0.070100	0.008840	335	3.0	99.1	653	5.8	99.1	7.45	6.79	<0.100	0.2	2,420	
8/6/2019	0.218500	0.065600	0.008840												
8/7/2019	0.207600	0.062300	0.008840	292	4.0	98.6	506	6.9	98.6	7.42	6.69	<0.100	0.2	2,420	
8/8/2019	0.203500	0.061100													
8/9/2019	0.236300	0.070900													
8/10/2019	0.182600	0.054800	0.004420												
8/11/2019	0.195800	0.058700	0.004420												
8/12/2019	0.228900	0.068700	0.006630												
8/13/2019	0.201000	0.060300													
8/14/2019	0.194300	0.058300													
8/15/2019	0.198900	0.059700	0.013260												
8/16/2019	0.254600	0.076400	0.007072												
8/17/2019	0.238300	0.071500	0.004420												
8/18/2019	0.157100	0.047100	0.003536												
8/19/2019	0.207500	0.062300	0.004420												
8/20/2019	0.299100	0.089700													
8/21/2019	0.234900	0.070400	0.008840												
8/22/2019	0.223300	0.067000	0.004420												
8/23/2019	0.206500	0.062000	0.008840												
8/24/2019	0.263400	0.079000													
8/25/2019	0.359600	0.107900	0.004420												
8/26/2019	0.313100	0.093900	0.008840												
8/27/2019	0.259000	0.077700	0.004420												
8/28/2019	0.243100	0.072900													
8/29/2019	0.248400	0.074500													
8/30/2019	0.225400	0.067600	0.011050												
8/31/2019	0.260200	0.078100	0.004420												
Minimum	0.157100	0.047100	0.003536	292	3.0	98.6	506	5.8	98.6	7.42	6.69	<0.100	0.2	2,420	
Maximum	0.359600	0.107900	0.013260	335	4.0	99.1	653	6.9	99.1	7.45	6.79	<0.100	0.2	2,420	
Total	7.146500	2.144100	0.148512	627	7.0	198	1,159	12.8	198	14.9	13.5	0.200	0.4	4,840	
Average	0.230532	0.069165	0.006457	314	3.5	98.9	579	6.4	98.9	7.44	6.74	<0.100	0.2	2,420	

Knoxville, Illinois Wastewater Treatment Plant
 Operated by Bock Inc.
 Monthly Report for August, 2019

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)
8/1/2019							1,536	81.5	58.4		
8/2/2019							1,920	84.4	61.1		
8/3/2019							1,536	87.4	60.8		
8/4/2019							1,920	85.5	63.2		
8/5/2019	190	<4.00	97.9	370	7.8	97.9	1,536	86.3	64.2	0.34	
8/6/2019							1,536	83.3	60.5		
8/7/2019	170	<4.00	97.6	294	6.9	97.6	1,920	84.7	65.1		
8/8/2019							1,536	83.3	56.9	0.01	
8/9/2019							1,536	82.1	60.3		
8/10/2019							1,536	82.5	65.2		
8/11/2019							1,920	84.3	70.5	0.46	
8/12/2019							1,536	79.2	68.1	0.13	
8/13/2019							1,920	83.1	64.6		
8/14/2019							1,536	78.8	59.8		
8/15/2019							1,536	78.8	59.8		
8/16/2019							1,536	83.4	67.5	0.31	
8/17/2019							1,920	79.1	67.0	0.02	
8/18/2019							1,536	83.1	66.1		
8/19/2019							1,920	88.6	70.2	Trace	
8/20/2019							1,536	81.5	64.5	0.49	
8/21/2019							1,920	78.8	63.3		
8/22/2019							1,920	80.3	58.2		
8/23/2019							1,920	80.1	54.2		
8/24/2019							1,920	76.7	56.3		
8/25/2019							1,152	76.7	57.3	0.93	
8/26/2019							1,536	73.7	63.1	0.01	
8/27/2019							1,536	78.1	54.7		
8/28/2019							1,920	77.3	56.6		
8/29/2019							1,536	82.4	59.2		
8/30/2019							1,920	72.2	55.1		
8/31/2019							1,920	69.2	57.3	0.25	
Minimum	170	<4.00	97.6	294	6.9	97.6	1,152	69.2	54.2	0.01	
Maximum	190	<4.00	97.9	370	7.8	97.9	1,920	88.6	70.5	0.93	
Total	360	8.00	196	665	14.7	196	52,608	2,506	1,909	2.95	
Average	180	<4.00	97.8	332	7.4	97.8	1,697	80.9	61.6	0.30	

Knoxville, Illinois Wastewater Treatment Plant
 Operated by Bock Inc.
 Monthly Report for August, 2019
 Outfall A01
 Excess Flow Discharge

Date	BOD (mg/l)	TSS (mg/l)	NH3 (as N) (mg/l)	Fecal Coliform (cfu's/100ml)	Flow (mgd)
8/1/2019					0.000000
8/2/2019					0.000000
8/3/2019					0.000000
8/4/2019					0.000000
8/5/2019					0.000000
8/6/2019					0.000000
8/7/2019					0.000000
8/8/2019					0.000000
8/9/2019					0.000000
8/10/2019					0.000000
8/11/2019					0.000000
8/12/2019					0.000000
8/13/2019					0.000000
8/14/2019					0.000000
8/15/2019					0.000000
8/16/2019					0.000000
8/17/2019					0.000000
8/18/2019					0.000000
8/19/2019					0.000000
8/20/2019					0.000000
8/21/2019					0.000000
8/22/2019					0.000000
8/23/2019					0.000000
8/24/2019					0.000000
8/25/2019					0.000000
8/26/2019					0.000000
8/27/2019					0.000000
8/28/2019					0.000000
8/29/2019					0.000000
8/30/2019					0.000000
8/31/2019					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 August, 2019
 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)
08/01/19							0.000000
08/02/19							0.000000
08/03/19							0.000000
08/04/19							0.000000
08/05/19							0.000000
08/06/19							0.000000
08/07/19							0.000000
08/08/19							0.000000
08/09/19							0.000000
08/10/19							0.000000
08/11/19							0.000000
08/12/19							0.000000
08/13/19							0.000000
08/14/19							0.000000
08/15/19							0.000000
08/16/19							0.000000
08/17/19							0.000000
08/18/19							0.000000
08/19/19							0.000000
08/20/19							0.000000
08/21/19							0.000000
08/22/19							0.000000
08/23/19							0.000000
08/24/19							0.000000
08/25/19							0.000000
08/26/19							0.000000
08/27/19							0.000000
08/28/19							0.000000
08/29/19							0.000000
08/30/19							0.000000
08/31/19							0.000000
Minimum							0.000000
Maximun							0.000000
Total							0.000000
Average							0.000000

DMR Copy of Record

Permit: IL0022209
Permit #: No
Major: No
Permitted Feature: INF Influent Structure
Report Dates & Status: From 08/01/19 to 08/31/19
Monitoring Period: From 08/01/19 to 08/31/19
Considerations for Form Completion: BOW ID: W0950300002
Principal Executive Officer: Stanley Bookewitz
First Name: Stanley
Last Name: Bookewitz
No Data Indicator (NDDI): No Data Indicator (NDDI)
Form NDDI: No Data Indicator (NDDI)

Parameter Code	Monitoring Location	Season	# Param. NDDI	Quantity or Loading			Quality or Concentration			# of Ex Frequency of Analysis	Sample Type
				Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3		
00310 BOD, 5-day, 20 deg. C	G - Raw Sewage Influent 0		-								
00530 Solids, total suspended	G - Raw Sewage Influent 0		-								
50030 Flow, in conduit or thru treatment plant	G - Raw Sewage Influent 0		-								

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.

Edr Check Errors
No errors.

Comments
No errors.

Attachments
No attachments.

Report Last Saved By: KNOXVILLE, CITY OF
User: bookinc1992
Name: Stanley Bookewitz
E-Mail: stanb@bookinc.net
Date/Time: 2019-09-06 12:00 (Time Zone: -05:00)

Report Last Signed By: bookinc1992
User: Stanley Bookewitz
Name: Stanley Bookewitz
E-Mail: stanb@bookinc.net
Date/Time: 2019-09-06 12:05 (Time Zone: -05:00)

Permittee: KNOXVILLE, CITY OF
Permittee Address: 33 NORTHSIDE PUBLIC SQUARE, KNOXVILLE, IL 61448
Facility: KNOXVILLE STP
Facility Location: 507 SOUTH DIVISION STREET, KNOXVILLE, IL 61448

Discharge: INF-L INFLUENT MONITORING
DMR Due Date: 09/25/19
Status: NotDMR Validated

Operator-in-Charge: Stanley Bookewitz
Title: Stanley Bookewitz
Telephone: 309-552-2789

DMR Copy of Record

Permit: IL0022209
Permit #: No
Major: 901 Internal Outfall
Permitted Feature: 901 Internal Outfall
Report Dates & Status: From 08/01/19 to 08/31/19
Monitoring Period: Considerations for Form Completion
BOW ID: W0980300002
Principal Executive Officer: Stanley
First Name: Stanley
Last Name: Bockelwitz
No Data Indicator (NODI):

Permittee: KNOXVILLE CITY OF
Permittee Address: 33 NORTHSIDE PUBLIC SQUARE
 KNOXVILLE, TN 37448
Discharge: B01-0 STP INTERNAL OUTFALL
DMR Due Date: 09/25/19
Title: Operator-in-Charge

Facility: KNOXVILLE STP
Facility Location: 507 SOUTH DIVISION STREET
 KNOXVILLE, TN 37448
Status: NotDMR Validated
Telephone: 309-882-2789

Parameter Name	Monitoring Location	Season #	Param NODI	Quantity/Loading		Quality of Concentration			Units	# of Analytes	Sample Type	
				Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3				Value 3
00360 Oxygen, dissolved [DO]	1 - Effluent Gross	1	-	Sample Permit Req. Value NODI	6.74	=	6.74	=	6.89	18 - mg/L	0290 - Twice Per Month	CP-COMFOS
00360 Oxygen, dissolved [DO]	1 - Effluent Gross	1	-	Sample Permit Req. Value NODI	5.5 MO AV MN	>=	4.5 MN WK AV	>=	3.5 DAILY MN	18 - mg/L	0290 - Twice Per Month	CP-COMFOS
00400 pH	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	7.42	=	6 MINIMUM	=	7.45	12 - SU	0290 - Twice Per Month	GR-GRAB
00360 Sulfide, total suspended	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	6.4	=	6.9	=	3.5	19 - mg/L	0290 - Twice Per Month	CP-COMFOS
00360 Sulfide, total suspended	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	165 MO AVG	<=	350 DAILY MX	<=	24 DAILY MX	19 - mg/L	0290 - Twice Per Month	CP-COMFOS
00819 Nitrogen, ammonia total (as N)	1 - Effluent Gross	1	-	Sample Permit Req. Value NODI	0.2	=	0.2	=	0.1	19 - mg/L	0290 - Twice Per Month	CP-COMFOS
00819 Nitrogen, ammonia total (as N)	1 - Effluent Gross	1	-	Sample Permit Req. Value NODI	12 MO AVG	<=	44 DAILY MX	<=	32 DAILY MX	19 - mg/L	0290 - Twice Per Month	CP-COMFOS
00819 Nitrogen, ammonia total (as N)	8 - Other Treatment Process Complete	1	-	Sample Permit Req. Value NODI	0.2	=	0.2	=	0.1	19 - mg/L	0290 - Twice Per Month	CP-COMFOS
00819 Nitrogen, ammonia total (as N)	8 - Other Treatment Process Complete	1	-	Sample Permit Req. Value NODI	32 WELY AVG	<=	32 WELY AVG	<=	23 WELY AVG	19 - mg/L	0290 - Twice Per Month	CP-COMFOS
50060 Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	0.230582	=	0.3866	=	03 - MSO	03 - MSO	9999 - Continuous	9999 - Continuous
50060 Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	Req Mon MO AVG	=	Req Mon DAILY MX	=	03 - MSO	03 - MSO	9999 - Continuous	9999 - Continuous
50060 Chlorine, total residual	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	7.4	=	7.8	=	26 - B/D	19 - mg/L	0290 - Twice Per Month	GR-GRAB
50060 Chlorine, total residual	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	138 MO AVG	<=	275 DAILY MX	<=	26 - B/D	19 - mg/L	0290 - Twice Per Month	GR-GRAB
74055 Calcium, fecal general	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	7.4	=	7.8	=	26 - B/D	19 - mg/L	0290 - Twice Per Month	GR-GRAB
74055 Calcium, fecal general	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	138 MO AVG	<=	275 DAILY MX	<=	26 - B/D	19 - mg/L	0290 - Twice Per Month	GR-GRAB
80029 BOD, carbonaceous 15 day, 20 C	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	7.4	=	7.8	=	26 - B/D	19 - mg/L	0290 - Twice Per Month	GR-GRAB
80029 BOD, carbonaceous 15 day, 20 C	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	138 MO AVG	<=	275 DAILY MX	<=	26 - B/D	19 - mg/L	0290 - Twice Per Month	GR-GRAB

Submission Note

If a parameter row does not contain any values for the Sample ID, 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 this monitoring period.

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

2019-09-06 11:57 (Time Zone: -05:00)

bookinc1992

Stanley Bookwitz

stanb@bookinc.net

2019-09-06 12:04 (Time Zone: -05:00)

DMR Copy of Record

Permit: IL0022209
Permit #: IL0022209
Major: No
Permitted Feature: A01 External Outfall
Report Dates & Status: From 08/01/19 to 08/31/19
Monitoring Period: DMR Due Date: 09/25/19
Considerations for Form Completion: BOW ID: W0950300002; NUMBER OF DAYS OF DISCHARGE:
Principal Executive Officer: Stanley Bockwitz
First Name: Stanley
Last Name: Bockwitz
No Data Indicator (NODI):
Form NODI:
Permittee: KNOXVILLE CITY OF
Permittee Address: 33 NORTHSIDE PUBLIC SQUARE
 KNOXVILLE, IL 61448
Facility: KNOXVILLE STP
 507 SOUTH DIVISION STREET
 KNOXVILLE, IL 61448
Discharge: A01-4 EXCESS FLOW
Operator-in-Charge:
Status: NEADMR Validated
Telephone: 309-852-2789

Code	Parameter Name	Monitoring Location Season 2 Param: NODI		Quantity of Loading		Quality of Concentration		# of Ex	Frequency of Analysis	Sample Type
		Value 1	Value 2	Qualifier 1	Qualifier 2	Qualifier 1	Qualifier 2			
00379BOD	5-day, 20 deg. C	1 - Effluent Gross	0			19 - mg/L			DJDS - Daily When Discharging	GR - GRAB
00550	Sulfide, total suspended	1 - Effluent Gross	0			19 - mg/L			DJDS - Daily When Discharging	GR - GRAB
00810	Nitrogen, ammonia total (as N)	1 - Effluent Gross	0			400 DAILY MX	13 - #/100ML		DJDS - Daily When Discharging	GR - GRAB
74095	Coliform, fecal general	1 - Effluent Gross	0			400 DAILY MX	13 - #/100ML		DJDS - Daily When Discharging	GR - GRAB
82220	Flow, total	1 - Effluent Gross	0						DJDS - Daily When Discharging	ON - 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:

Name: Stanley Bockwitz
E-Mail: stanb@bockinc.net
Date/Time: 2019-09-06 11:48 (Time Zone: -05:00)
Report Last Signed By: bockinc192
User: Stanley Bockwitz
Name: Stanley Bockwitz
E-Mail: stanb@bockinc.net
Date/Time: 2019-09-06 12:04 (Time Zone: -05:00)

DMR Copy of Record

Permit: IL0022209
Permit #: No
Major: No
Permitted Feature: 001 External Outfall
Report Dates & Status: From 08/01/18 to 08/31/18
Monitoring Period: From 08/01/18 to 08/31/18
Considerations for Form Completion: BOW ID: W095030002; NUMBER OF DAYS OF DISCHARGE:
Principal Executive Officer: Stanley Bockewitz
First Name: Stanley
Last Name: Bockewitz
No Data Indicator (NODI):
Form (NODI):
Permittee: KNOXVILLE CITY OF
Permittee Address: 33 NORTH-SIDE PUBLIC SQUARE
 KNOXVILLE, IL 61448
Facility: KNOXVILLE STP
Facility Location: 507 SOUTH DIVISION STREET
 KNOXVILLE, IL 61448
Discharge: 001-0 COMBINED DISCHARGE FROM A01 AND B01
DMR Due Date: 08/25/19
Status: NEDMR Validated
Title: Operator-in-Charge
Telephone: 309-852-2789

Code	Parameter Name	Monitoring Location season & Param. (NODI)	Quantity of Loading		Quantity of Concentration			# of Ex.	Frequency of Analysis	Sample Type
			Qualifier 1	Qualifier 2	Value 1	Qualifier 2	Value 2			
20320	Oxygen, dissolved [DO]	1 - Effluent Gross	0		Req Mon MO AVG C - No Discharge		Req Mon MIN/MK AV C - No Discharge		18 - mg/L	DUDS - Daily When Discharging GR - GRAB
00310	BOD 5-day, 20 deg. C	1 - Effluent Gross	0		30 MO AVG C - No Discharge		45 WKLY AVG C - No Discharge		18 - mg/L	DUDS - Daily When Discharging GR - GRAB
00400	pH	1 - Effluent Gross	0		5 MINIMUM C - No Discharge		9 MAXIMUM C - No Discharge		12 - SU	DUDS - Daily When Discharging GR - GRAB
00530	Sulfide, total suspended	1 - Effluent Gross	0		30 MO AVG C - No Discharge		45 WKLY AVG C - No Discharge		18 - mg/L	DUDS - Daily When Discharging GR - GRAB
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0				Req Mon MO AVG C - No Discharge		18 - mg/L	DUDS - Daily When Discharging GR - GRAB
30080	Chlorine, total residual	1 - Effluent Gross	0				Req Mon MO AVG C - No Discharge		18 - mg/L	DUDS - Daily When Discharging GR - GRAB
82220	Flow, total	1 - Effluent Gross	0		Req Mon MO TOTAL 90 - Mesflow C - No Discharge					DUDS - 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.

Comments: No errors.
Attachments: No attachments.
Report Last Saved By: KNOXVILLE CITY OF
User: bockewit1992
Name: Stanley Bockewitz
E-Mail: stanb@bockewit.net
Date/Time: 2019-09-06 11:47 (Time Zone: -05:00)
Report Last Signed By: bockewit1992
User: Stanley Bockewitz
Name: Stanley Bockewitz
E-Mail: stanb@bockewit.net
Date/Time: 2019-09-06 12:03 (Time Zone: -05:00)