

Northeast Regional Office CLEAN WATER PROGRAM

Application Type

Facility Type

Major / Minor

Minor

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

 Application No.
 PA0060518

 APS ID
 572695

 Authorization ID
 1322733

Applicant Name		& Great Bend Borough anna County JSA	Facility Name	Hallstead Great Bend Joint Sewer Authority
Applicant Address	PO Box 74	47	Facility Address	Sewer Authority
	Great Ben	d, PA 18821-0747	<u> </u>	Great Bend, PA 18821-0747
Applicant Contact	Bret Jenni	ngs	Facility Contact	Corey Rudock
Applicant Phone	(570) 879-	2994	Facility Phone	(570) 879-2994
Client ID	63184		Site ID	252188
Ch 94 Load Status	Not Overlo	paded	Municipality	Great Bend Borough
Connection Status	No Limitat	ions	County	Susquehanna
Date Application Rece	eived A	ugust 7, 2020	EPA Waived?	No
Date Application Acce	epted A	august 7, 2020	If No, Reason	Significant CB Discharge

Summary of Review

The Authority is requesting the renewal of NPDES Permit No. PA0060518 to discharge up to 0.5 MGD of treated sewage from the POTW into the Susquehanna River, a warm water fishes (WWF) receiving stream located in State Water Plan watershed 4-E. Per the Department's current existing use list, the receiving water does not have an existing use classification that is more protective than the designated use. The discharge is not expected to affect public water supplies.

The Hallstead-Great Bend Joint Sewer Authority's Sanitary Sewer System serves customers in Great Bend Borough, Great Bend Township, & Hallstead Borough. The WWTP became operational in December 1987. The permit is being renewed with the same effluent limits as the previous permit since conditions have not changed at the treatment plant after it was upgraded and expanded to treat a design flow of 0.5 MGD. Water Quality modeling recommended the addition of Zinc monitoring which will be added to the Draft Permit.

On December 29, 2010, the U.S. Environmental Protection Agency established the Chesapeake Bay Total Maximum Daily Load (TMDL). The TMDL is a historic and comprehensive "pollution diet" to restore clean water in the Chesapeake Bay and the region's streams, creeks, and rivers. Section 2 of Pennsylvania's Phase 3 Chesapeake Bay Watershed Implementation Plan (Phase 3 WIP) describes Pennsylvania's strategy for reducing nutrients to the Chesapeake Bay from wastewater facilities. The supplement to the Phase 3 WIP provides an update on Chesapeake Bay TMDL implementation activities for point sources and DEP's current implementation strategy for wastewater. The document is updated periodically to reflect changes due to Department of Environmental Protection's (DEP's) permit actions as well as changes to strategies in managing the wastewater sector's allocated loads under the TMDL.

The current Phase 3 Watershed Implementation Plan Wastewater Supplement - Revised, December 17, 2019 associated to Hallstead is:

Table 2: Significant Facilities Not in the TMDL.

Approve	Deny	Signatures	Date
Х		Berna / Feis	
		Bernard Feist, P.E. / Environmental Engineer	August 12, 2020
Х		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	8-17-20

Sullinary of Review							
NPDES Permit No. Facility		TN Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	Sector			
	Hallstead-Great Bend Joint Sewer						
PA0060518	Authority	9,741	1,218	Sewage			

Summary of Povious

Other associated notes from the Phase 3 WIP Wastewater Supplement Revised, December 17, 2019 related to Hallstead are:

Hallstead-Great Bend Joint Sewer Authority (PA0060518) will be upgrading to a design flow of 0.5 MGD.
This facility was originally a non-significant discharger (0.35 MGD). A permit has been issued with Cap
Loads of 9,741 lbs/yr TN and 1,218 lbs/yr TP. This facility was previously considered non-significant, and
so its load will be moved from the Non-Significant sector to the Significant Sewage sector.

This was approved during the last Permit Cycle and the Permit Part C explanation will remain unchanged.

The applicant utilizes Ultra-Violet disinfection but the TRC limit will remain in case used. This is also explained in Part C of the Permit.

The WMS Report query "Water Management System Inspections" was run. On 05/21/2020 an Administrative/File Review was done with No Violations noted.

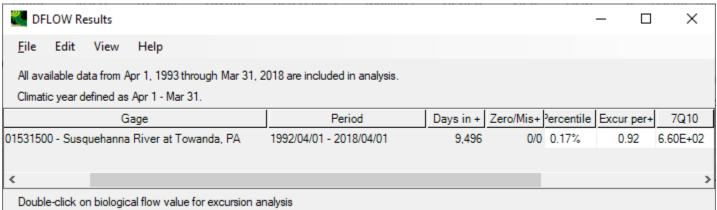
The WMS "Open Violations by Client Report" was run and there are No Open Violations.

The Existing Permit expires on October 31, 2020 and the renewal was submitted August 7, 2020.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information	mation	
Outfall No. 001	Design Flow (MGD)	5
Latitude 41° 58′ 17.76″	Longitude	-75° 44' 56.19"
Quad Name	Quad Code	
Wastewater Description: Sewage Effluent		
Receiving Waters Susquehanna River (WWF) NHD Com ID 43488179	Stream Code	<u>6685</u> 335
Drainage Area 2,100	Yield (cfs/mi²)	0.084
Q ₇₋₁₀ Flow (cfs) 176.4	Q ₇₋₁₀ Basis	USGS gage sta. 01531500
Elevation (ft) 858	Slope (ft/ft)	.009
Watershed No. 4-E	Chapter 93 Class.	WWF
Existing Use na	Existing Use Qualifier	
Exceptions to Use	Exceptions to Criteria	
Assessment Status Impaired		
Cause(s) of Impairment MERCURY, METALS		
Source(s) of Impairment SOURCE UNKNOWN		
TMDL Status Final	Name Susquehanr	a River PCB
Nearest Downstream Public Water Supply Intake PWS Waters PWS RMI	Binghamton Water Authority Flow at Intake (cfs) Distance from Outfall (mi)	
TFLOW Results		- □ ×



 Q_{7-10} LowFlowYield (cfs/mi²)= 660/7,797 = 0.085

STATION.--01531500 SUSQUEHANNA RIVER AT TOWANDA, PA

LOCATION.--Lat 41`45'55", long 76`26'28", Bradford County, Hydrologic Unit 02050106, on right bank at Bridge Street in Towanda, and 1.8 mi upstream from Towanda Creek.

DRAINAGE AREA.--7,797 square miles.

PERIOD OF RECORD.--October 1913 to current year. Gage-height records collected at same site from October 1892 to September 1913 are contained in reports of U.S. Weather Bureau.

Outfall 001 RMI 335 - Elev 858 ft Clicked Point (Latitude, Longitude):



Low-Flow Statistics Parame	eters[100 Percent (2100 square miles) Low Flow Region 5]				
Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2100	square miles	4.84	982

 Q_{7-10} Flow (cfs) = 2100 mi² * 0.085 cfs/mi² = 178.5 cfs at Outfall 001

RMI 334 - Elev 856 @ Trowbridge Creek Trib



Low-Flow Statistics Parameters [100 Percent (2110 square miles) Low Flow Region 5]								
Parameter Code	Parameter Name	Value	Units					
DRNAREA	Drainage Area	2120	square miles					

	Tre	atment Facility Summa	ry	
Γreatment Facility Nar	ne: Hallstead Great Ben	d Joint Sewer Authority		
WQM Permit No.	Issuance Date			
5807402	1/15/08			
	Degree of			Avg Annual
Waste Type	Treatment	Process Type	Disinfection	Flow (MGD)
Sewage	Secondary	Activated Sludge	UV	0.5
Undraulia Canasitu	Organia Canacity			Discolida
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposa
0.5	1,500	Not Overloaded	Activated Sludge	Other WWTP

Development of Effluent Limitations						
Outfall No.	001		Design Flow (MGD)	.5		
Latitude	41° 58' 19.70	II	Longitude	-75° 44' 54.95"		
Wastewater D	Description:	Sewage Effluent				

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

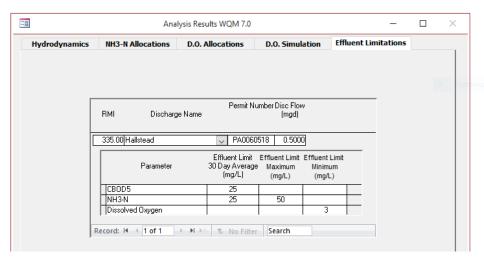
Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
CBOD ₅	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
CBOD5	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
Total Suspended Solids	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform				
(5/1 - 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform				
(5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform				
(10/1 - 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform				
(10/1 - 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

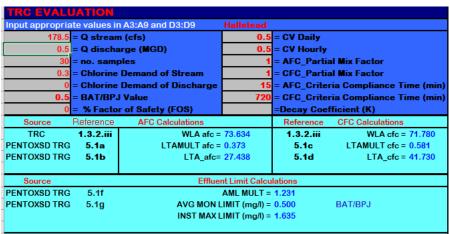
Comments: UV utilized - TRC 1.6 IMAX if used

Water Quality-Based Limitations

A "Reasonable Potential Analysis" determined the following parameters were candidates for limitations:

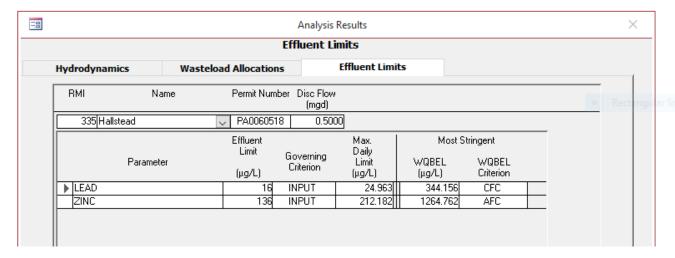
The following limitations were determined through water quality modeling (output files attached):





		WATER QUALITY PO	SION 2.7	CONCERN		CLEAR FORM
Facility: Hallstead	_		NPDES Permit No			Outfall: 001
Analysis Hardness (mg/L): 10 Stream Flow, Q ₇₋₁₀ (cfs): 17			Discharge Flow (f	MGD): 0.5	Ana	lysis pH (SU): 7
Parameter		zimum Concentration Application or DMRs (±0/1)	Most Stringent Criterion	Candidate For PENTOXSD Modeling?	Most Stringent VOREL (=a/L)	Screening Recommendation
_ Total Dissolved Solids		326000	500000	No		
♣ Chloride		75500	250000	No		
Chloride Bromide		20	N/A	No		
Sulfate		42600	250000	No		
Total Aluminum			750			
Total Antimony			5,6			
Total Arsenic			10			
Total Barium			2400			
Total Berullium			N/A			
Total Boron			1600			
Total Cadmium			0.271			
Total Chromium			N/A			
Hexavalent Chromium			10.4			
Total Cobalt			19			
Total Copper	<	8	9.3	No		
Free Available Cyanide			5.2			
Total Cyanide Dissolved Iron			N/A			
			300			
Total Iron			1500			
Total Lead	<	16	3.2	Yes	344	No Limits/Monitoring
Total Manganese			1000			
Total Mercury			0.05			
Total Nickel			52.2			
Total Phenols (Phenolics)			5			
Total Selenium			5.0			
Total Silver			3.8			
Total Thallium			0.24			
Total Zinc		136	119.8	Yes	1265	Monitor
Total Molybdenum			N/A			

Comments: Zinc Monitoring will be added monthly this permit cycle









Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

			Effluent L	imitations			Monitoring Re	quirements
Parameter	Mass Units	(lbs/day) (1)		Concentrati	ons (mg/L)		Minimum (2)	Required
r ai ailletei	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
TRC	XXX	XXX	XXX	XXX	XXX	1.6	1/day	Grab
CBOD5	104.3	166.7	XXX	25.0	40.0	50	1/week	8-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS	125.1	187.7	XXX	30.0	45.0	60	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Nitrate-Nitrite	XXX	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Nitrate-Nitrite (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	Calculation
Total Nitrogen (lbs) Effluent Net	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Nitrogen (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation

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		Effluent Limitations						
Parameter	Mass Units	(lbs/day) (1)	Concentrations (mg/L)				Minimum ⁽²⁾	Required
r ai ailictei	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum	Measurement Frequency	Sample Type
				_				8-Hr
Ammonia	XXX	XXX	XXX	Report	XXX	XXX	2/week	Composite
Ammonia (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
								8-Hr
TKN	XXX	XXX	XXX	Report	XXX	XXX	2/week	Composite
TKN (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
							.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	8-Hr
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	2/week	Composite
Total Phosphorus (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus (lbs)	Report							
Effluent Net	Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
								8-Hr
Zinc	XXX	XXX	XXX	Report	XXX	XXX	1/month	Composite

			Monitoring Requirements					
Parameter	Mass Unit	s (lbs/day) ⁽¹⁾		Concentrat	Minimum (2)	Required Sample Type		
Faranietei	Monthly	Annual	Annual Monthly		Monthly Average Maximum			Measurement Frequency
Total Nitrogen (lbs)		9741						
Effluent Net	XXX	Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Nitrogen (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Ammonia (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus (lbs)		1218					•	
Effluent Net	XXX	Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation

Compliance History

DMR Data for Outfall 001 (from July 1, 2019 to June 30, 2020)

Flow (MGD)	Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19
Average Monthly 0.263 0.338 0.312 0.320 0.353 0.316 0.337 0.324 0.270 0.236 0.252 0.266	Flow (MGD)												
Daily Maximum 0.327 0.612 0.350 0.359 0.463 0.401 0.451 0.594 0.327 0.266 0.284 0.443 PH (S.U.)		0.263	0.338	0.312	0.320	0.353	0.316	0.337	0.324	0.270	0.236	0.252	0.266
Daily Maximum 0.327 0.612 0.350 0.359 0.463 0.401 0.451 0.594 0.327 0.266 0.284 0.443 PH (S.U.)													
Minimum 6.3 6.6 6.3 6.2 6.7 6.8 6.6 6.4 6.6 6.5 6.5 6.5 6.5 PH (S.U)	Daily Maximum	0.327	0.612	0.350	0.359	0.463	0.401	0.451	0.594	0.327	0.266	0.284	0.443
PH (S.U.) Instantaneous	pH (S.U.)												
Instantaneous Maximum GG GG GG GG GG GG GG	Minimum	6.3	6.6	6.3	6.2	6.7	6.8	6.6	6.4	6.6	6.5	6.5	6.5
Maximum 6.9 7.0 7.0 7.3 7.3 7.1 7.0 7.0 7.0 7.0 7.0 7.0 6.9 7.0	pH (S.U.)												
TRC (mg/L) Instantaneous Maximum GG GG GG GG GG GG GG	Instantaneous												
Instantaneous GG GG GG GG GG GG GG	Maximum	6.9	7.0	7.0	7.3	7.3	7.1	7.0	7.0	7.0	7.0	6.9	7.0
Maximum GG GG GG GG GG GG GG	TRC (mg/L)												
CBOD5 (lbs/day)													
Average Monthly 6.5 7.7 7.8 7.9 8.5 9.3 8.7 7.5 6.8 5.7 6.2 6.6		GG											
CBOD5 (lbs/day) Weekly Average 7.4 8.7 8.4 8.3 10.5 12.2 11.3 8.2 7.9 5.9 6.7 7.1													
Weekly Average		6.5	7.7	7.8	7.9	8.5	9.3	8.7	7.5	6.8	5.7	6.2	6.6
CBOD5 (mg/L)	` ,												
Average Monthly Canal CBOD5 (mg/L) CBOD5 (mg/		7.4	8.7	8.4	8.3	10.5	12.2	11.3	8.2	7.9	5.9	6.7	7.1
CBOD5 (mg/L) Weekly Average <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.0 <3.													
Weekly Average < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0 < 3.0		< 3.0	< 3.0	< 3.0	< 3.0	< 3.1	< 3.6	< 3.0	< 3.0	< 3.0	< 3.0	3.0	< 3.0
BOD5 (lbs/day) Raw Sewage Influent													

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TSS (lbs/day)												
Raw Sewage Influent												
 br/> Daily Maximum	547	578	483.0	643	573	649	1189	1605	639	360	464	1022
TSS (lbs/day)												
Weekly Average	12.8	19.6	14.1	20.0	17.5	24.4	18.8	13.7	13.1	9.8	11.9	55.9
TSS (mg/L)												
Average Monthly	5.25	6.1	< 5.0	7.1	< 5.0	6.9	5.3	< 5.0	< 5.0	< 5.0	5.2	< 10.9
TSS (mg/L)												
Raw Sewage Influent												
 br/> Average												
Monthly	210	177	124.0	206	174	183	193	264	189	158	135	185
TSS (mg/L)												
Weekly Average	6.0	8.0	< 5.0	7.5	5.0	9.0	6.0	< 5.0	< 5.0	< 5.0	6.0	23.5
Fecal Coliform												
(CFU/100 ml)												
Geometric Mean	< 1.0	< 31.8	< 5.2	1.3	< 1.0	< 1	< 1.0	< 1.2	< 1.0	1.2	< 2.4	3.1
Fecal Coliform												
(CFU/100 ml)												
Înstantaneous												
Maximum	1.0	172.3	1986.3	3.1	< 1.0	< 1	1	2.0	< 1.0	2	6.3	7.5
Nitrate-Nitrite (mg/L)												
Average Monthly	4.45	5.46	7.6	6.21	4.8	5.2	6.5	6.36	4.47	4.55	7.28	3.04
Nitrate-Nitrite (lbs)												
Total Monthly	289	450	597	5.3	404	420	568	485	314	267	469	209
Total Nitrogen (mg/L)												
Average Monthly	5.841	6.465	8.749	7.573	6.03	6.427	7.555	7.278	5.372	< 5.607	8.68	4.244
Total Nitrogen (lbs)												
Effluent Net 												
Total Monthly	379	534	686	613	507	521	660	555	376	< 329	559	291
Total Nitrogen (lbs)												
Total Monthly	379	534	686	613	507	521	660	555	376	< 329	559	291
Total Nitrogen (lbs)												
Effluent Net 												
Total Annual										5876		
Total Nitrogen (lbs)												
Total Annual										5876		
Ammonia (mg/L)												
Average Monthly	< 0.103	< 0.1	< 0.109	< 0.1	< 0.115	< 0.121	< 0.1	< 0.104	< 0.341	< 0.168	0.19	< 0.391
Ammonia (lbs)												
Total Monthly	< 0.2	< 8.0	< 9.0	< 8.0	< 9.0	< 10	< 9.0	< 8	< 23	< 10	12	< 27
Ammonia (lbs)												
Total Annual										192		
TKN (mg/L)												
Average Monthly	1.39	1.007	1.15	1.363	1.23	1.225	1.052	0.919	0.898	< 1.059	1.4	1.203

NPDES Permit Fact Sheet Hallstead Great Bend Joint Sewer Authority

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TKN (lbs)												
Total Monthly	90	84.0	90	110	102	101	92	70	62	< 62	90	82
Total Phosphorus												
(mg/L)												
Average Monthly	1.384	< 0.205	< 0.237	0.633	0.709	0.758	0.757	0.876	0.387	0.623	1.266	0.793
Total Phosphorus (lbs)												
Effluent Net 												
Total Monthly	87	< 17.0	< 19.0	51	58	62	64	66	26	37	82	54
Total Phosphorus (lbs)												
Total Monthly	87	< 17.0	< 19.0	51	58	62	64	66	26	37	82	54
Total Phosphorus (lbs)												
Effluent Net 												
Total Annual										388		
Total Phosphorus (lbs)												
Total Annual										388		