pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0110116**
Wastewater Type	**Sewage**	APS ID	**1007482**
Facility Type	**SFTF**	Authorization ID	**1298467**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Feger, Reynold**	Facility Name	**Reynold Feger Building**
Applicant Address	764 Pottsville Street	Facility Address	4350 State Route 147
	Herndon, PA 17830-6990		Herndon, PA 17830-7439
Applicant Contact	Reynold Feger	Facility Contact	Reynold Feger
Applicant Phone	717-579-2072	Facility Phone	717-579-2072
Client ID	45043	Site ID	255704
SIC Code	4952	Municipality	Lower Mahanoy Township
SIC Description	Trans. & Utilities - Sewerage Systems	County	Northumberland
Date Application Received	December 5, 2019	WQM Required	No
Date Application Accepted	December 12, 2019	WQM App. No.	

Project Description: Renewal of a NPDES permit.

Summary of Review

The Reynold Feger Building currently operates as an insurance agency. The building was previously a restaurant served by this permitted SFTF. Discharge has not occurred since 2015.

A map of the discharge location is attached.

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.

Approve	Deny	Signatures	Date
X		*Keith C. Allison* Keith C. Allison / Project Manager	October 19, 2020
X		*Nicholas W. Hartranft* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	October 22, 2020

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.0019
Latitude	40º 41' 15.69"	Longitude	-76º 49' 48.66"
Quad Name	Pillow, PA	Quad Code	1331
Wastewater Description:	Sewage Effluent		
Receiving Waters	Fidlers Run (WWF, MF)	Stream Code	17540
NHD Com ID	54969937	RMI	1.58
Drainage Area	5.62 mi^2	Yield (cfs/mi^2)	0.039
Q_{7-10} Flow (cfs)	0.22	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	480	Slope (ft/ft)	Undetermined
Watershed No.	06B	Chapter 93 Class.	Warm Water Fishes, Migratory Fishes
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Attaining Use(s)		
Nearest Downstream Public Water Supply Intake	Suez Water near Dauphin, PA		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	17,000,000
PWS RMI	61.5	Distance from Outfall (mi)	35.2

Changes Since Last Permit Issuance: The stream and discharge information above were determined for the previous review and remain adequate.

Other Comments: No discharge has occurred from the facility since 2015. The wastewater is currently stored in the 2,500-gallon sludge holding tank for pumping.

No downstream water supply is expected to be affected by the discharge with the limitations and monitoring proposed.

Compliance History	
Summary of DMRs:	No discharge has occurred over the past permit term. DMRs are submitted.
Summary of Inspections:	The facility was inspected twice by the Department over the past permit term, most recently on November 9, 2018. Neither of the inspections have identified any violations although the 2018 inspection recommended installing a high-level alarm on the holding tank.

Treatment Facility Summary

Treatment Facility Name: Reynold Feger Building

WQM Permit No.	Issuance Date	Permit Covered:
4994402	Original – 8/25/94	0.0026 MGD Cromaglass plant
4994402 A-1	Amendment – 3/16/10	Rerate of plant from 0.0026 MGD to 0.0019 MGD

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Activated Sludge	Hypochlorite	0.0019

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0019	15.8	Not Overloaded		

Changes Since Last Permit Issuance: None

Other Comments: The treatment as approved under WQM permit No 4994402 Amendment No. 1 consists of screening basket, equalization tank with grinder pumps, six aerated Cromaglass units, erosion chlorinators and three chlorine contact tanks.

Existing 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.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/week	Grab
TRC	XXX	XXX	XXX	1.0	XXX	2.6	1/week	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50.0	1/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab

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.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
TRC	XXX	XXX	XXX	1.0	XXX	2.6	1/month	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50.0	1/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab

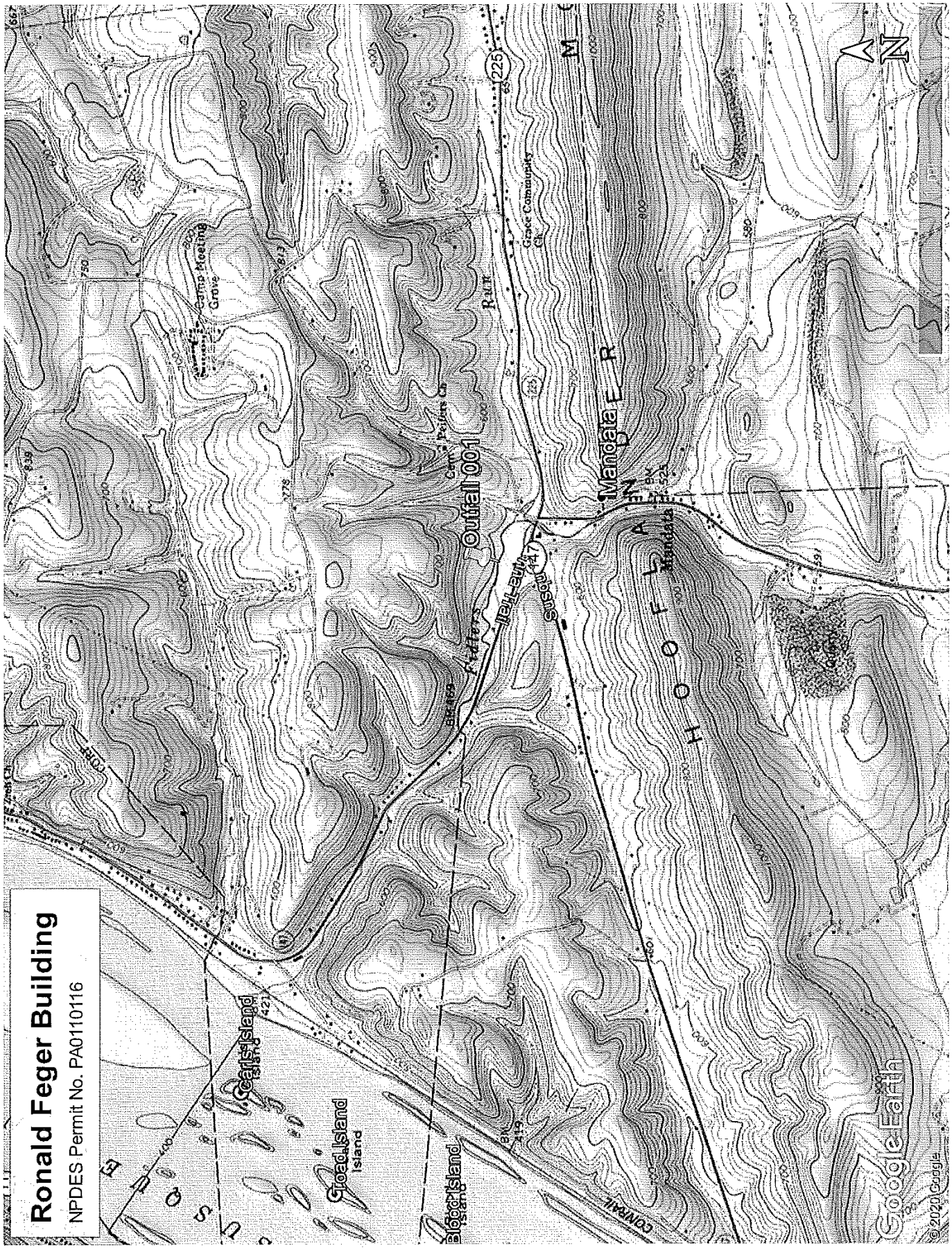
Compliance Sampling Location: Outfall 001

Other Comments: The above limitations and monitoring are unchanged from the exiting permit except for the removal of pH monitoring and reducing the monitoring for TRC from weekly to monthly consistent with the Department's current typical monitoring requirements for Small Flow Treatment Facilities. In addition, the CBOD5 and TSS Average Monthly and IMAX limitation now include an additional decimal point to satisfy the current requirements of WMS/ICIS.

These limitations are not consistent with current SFTF requirements due to the facility not being designed for consistency with the SFTF manual because it was not originally a SFTF and it predates the current SFTF manual. Attached TRC modeling shows that the existing tech-based limit of 1.0 mg/L for tablet chlorinators is adequate to protect the receiving stream.

Attachments:

A. Discharge Location Map
B. TRC Model


Ronald Feger Building
NPDES Permit No. PA0110116
Outfall 001
Mandata F R
Susquehanna River
Bear Island
Goat Island
Sears Island
Camp Meeting Grove
Grace Community Ch
Mandata
Quarry
Susquehanna
Google Earth
© 2020 Google

TRC_CALC.xls

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.22	= Q stream (cfs)	0.5	= CV Daily
0.0019	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
1	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 23.895	1.3.2.iii	WLA cfc = 23.289
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 8.904	5.1d	LTA_cfc = 13.539

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 1.000	BAT/BPJ
		INST MAX LIMIT (mg/l) = 3.270	

WLA afc	**(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))...** **...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)**
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
WLA_cfc	**(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))...** **...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)**
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)
LTA_cfc	wla_cfc*LTAMULT_cfc
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)
INST MAX LIMIT	**1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)**