pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0052728**
Wastewater Type	**Sewage**	APS ID	**1029851**
Facility Type	**SFTF**	Authorization ID	**1338645**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Turkey Hill Minit Markets, LLC**	Facility Name	**Turkey Hill Minit Market STP**
Applicant Address	165 Flanders Road	Facility Address	300 West Kings Highway
	Westborough, MA 01851		Coatesville, PA 19320
Applicant Contact	Chris Johnson	Facility Contact	Chris Johnson
Applicant Phone	(508) 270-4495	Facility Phone	(508) 270-4495
Client ID	51619	Site ID	238632
SIC Code	5411	Municipality	Coatesville City
SIC Description	Retail Trade - Grocery Stores	County	Chester
Date Application Received	November 23, 2020	WQM Required	
Date Application Accepted		WQM App. No.	

Project Description: Permit Renewal

Summary of Review

The applicant, Turkey Hill Minit Markets, requests approval for renewal of the NPDES permit to discharge 400 gpd of treated sewage from a small flow sewage treatment plant serving Turkey Hill Minit Market No. 177 located at 300 West Kings Highway, Coatesville, PA, to an unnamed tributary to West Branch Brandywine Creek, in Watershed 3-H.

The Turkey Hill Minit Market Store # 177 is a convenience store with retail petroleum distribution. The small flow sewage treatment plant consists of a 1,000-gallon tank septic tank, followed by a three-chamber treatment tank, a Biokinetic Filter and chlorine contact tank. There are two aerators installed in the treatment tank. As the discharge is located in the Christina River Basin, we have added permit limits for all parameters that ate listed in TMDL of Nutrients and Dissolved Oxygen Under Low Flow Conditions in the Christina River Basin. We have revised Dissolved Oxygen (DO) limit from 5.0 mg/l to 6.0 mg/l and Ammonia-Nitrogen limit from 15 mg/l to 10 mg/l. We have added effluent limits of Total Nitrogen and Phosphorus as listed in the TMDL for Christina River Basin. Effluent is generally in compliance with permit limits.

Following are effluent limits:

Parameter	Effluent limit in mg/l (Av. Mo)	Basis
CBOD5	25	Christina River Basin TMDL
Total Suspended Solids	30	25 Pa Code 92a.47
Ammonia-Nitrogen	10	Christina River Basin TMDL
Total Residual Chlorine	0.5	25 Pa Code 92a.47-48
pH (SU)	6.0 to 9.0 SU	25 Pa Code 92a.47, 95.2
Fecal Coliform (No./100 ml)	200 (Geo Mean)	25 Pa Code 92a.47
Dissolved Oxygen	6.0 minimum	Christina River Basin TMDL
Total Phosphorus	10	Christina River Basin TMDL
Total Nitrogen	20	Christina River Basin TMDL

Approve	Deny	Signatures	Date
X		Ketan Thaker Ketan Thaker / Project Manager	April 6, 2021
X		Pravin Patel Pravin C. Patel, P.E. / Environmental Engineer Manager	04/06/2021

Summary of Review

Act-14 Notifications to Chester County and City of Coatesville on August 26, 2020 by certified mail.

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 and Stream Data – 2 - Receiving Waters and PWS

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.0004
Latitude	40Âº 0' 14.35"	Longitude	-75Âº 49' 20.49"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to West Branch Brandywine Creek	Stream Code	
NHD Com ID	26105714	RMI	
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-H	Chapter 93 Class.	
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Christina River Basin

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Compliance History

DMR Data for Outfall 001 (from March 1, 2020 to February 28, 2021)

Parameter	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20
Flow (MGD) Average Monthly	0.000226	0.000356	0.000299	0.000314	0.000318	0.000401	0.000396	0.000334	0.000364	0.000302	0.000327	0.000435
pH (S.U.) Instantaneous Minimum	7.57	7.46	7.05	7.31	7.46	7.49	7.54	6.95	7.29	6.92	7.32	7.23
pH (S.U.) Instantaneous Maximum	7.57	7.46	7.05	7.31	7.46	7.49	7.54	6.95	7.29	6.92	7.32	7.23
DO (mg/L) Instantaneous Minimum	8.64	8.36	7.85	9.03	7.68	7.56	6.89	7.11	7.75	7.26	8.31	7.80
TRC (mg/L) Average Monthly	0.42	0.21	0.24	0.19	0.21	0.42	0.28	0.38	0.27	0.31	0.32	0.42
TRC (mg/L) Instantaneous Maximum	0.42	0.21	0.24	0.19	0.21	0.42	0.28	0.38	0.27	0.31	0.32	0.42
CBOD5 (mg/L) Average Monthly	5.8	5.9	6.2	5.0	11.7	5.5	5.4	6.7	6.0	4.0	6.4	6.7
CBOD5 (mg/L) Instantaneous Maximum	5.8	5.9	6.2	5.0	11.7	5.5	5.4	6.7	6.0	4.0	6.4	6.7
TSS (mg/L) Average Monthly	10.7	20.0	14.0	17.3	26.0	18.0	16.0	27.55	30.0	26.0	18.0	32.0
TSS (mg/L) Instantaneous Maximum	10.7	20.0	14.0	17.3	26.0	18.0	16.0	44.0	30.0	26.0	18.0	32.0
Fecal Coliform (No./100 ml) Geometric Mean	< 1	< 1	< 1	< 1	2	1	1	2	65	< 1	< 1	1
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 1	< 1	< 1	< 1	2	1	1	2	65	< 1	< 1	1
Ammonia (mg/L) Average Monthly	0.40	1.06	0.23	0.12	0.45	0.27	0.48	14.5	0.83	1.13	0.93	26.2
Ammonia (mg/L) Instantaneous Maximum	0.40	1.06	0.23	0.12	0.45	0.27	0.48	14.5	0.83	1.13	0.93	26.2

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
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/month	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.0	1/month	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50	1/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
Total Nitrogen	XXX	XXX	XXX	20.0	XXX	40	1/month	Grab
Ammonia	XXX	XXX	XXX	10.0	XXX	20	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	10.0	XXX	20	1/month	Grab