pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0009911**
Facility Type	**Industrial**	APS ID	**629381**
Major / Minor	**Minor**	Authorization ID	**1359473**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Papettis Hygrade Egg Products Inc.**	Facility Name	**Michael Foods Egg Products**
Applicant Address	68 Spain Road	Facility Address	68 Spain Road
	Klingerstown, PA 17941-9656		Klingerstown, PA 17941-9656
Applicant Contact	Kyle Strohecker Kyle.Strohecker@michaelfoods.com	Facility Contact	Kyle Strohecker
Applicant Phone	(570) 425-6223	Facility Phone	(570) 425-6223
Client ID	123964	Site ID	244458
Ch 94 Load Status	Not Overloaded	Municipality	Upper Mahantango Township
Connection Status		County	Schuylkill
Date Application Received	June 28, 2021	EPA Waived?	No
Date Application Accepted	June 28, 2021	If No, Reason	Significant Chesapeake Bay Facility

Purpose of Application: RENEWAL OF EXISTING NPDES PERMIT.

Summary of Review

The applicant is requesting the renewal of their NPDES permit to discharge treated IW, sewage, and stormwater from 4 outfalls. The receiving stream(s), Mahantango Creek (WWF) and Pine Creek (CWF, MF), are located in State Water Plan watershed 6-C and are classified for Warm Water Fishes, Cold Water Fishes, Migratory Fishes, aquatic life, water supply and recreation. As per the Department's current existing use list, the receiving streams do not have an existing use classification that is more protective than the designated use. The discharge is not expected to affect public water supplies.

Outfall 001 is rated for 0.295 MGD consisting of treated IW and sewage effluent. The industrial process wastewater is generated from egg cracking operations, egg washing and equipment cleaning. A package treatment plant treats their sanitary waste. This is a minor IW Facility not covered by an ELG with a .155 MGD Avg and a 0.1851 Daily Max Average.

The existing Permit limits will be retained. It is a significant Chesapeake Bay facility with WLAs. The total Nitrogen limit is **8,104 lbs/year** and the Total Phosphorus is **532 lbs/year**. Discharge loadings of TDS authorized by DEP, under NPDES permits or other authority that were issued or reissued prior to the effective date of §95.10 (August 21, 2010), are exempt from the treatment requirements of §95.10 until the net loading is to be increased, which is not the case since 1999. The $CBOD_5$, TSS, TRC, Fecal Coliform and Oil/ Grease are tech based limits. The Ammonia is a water quality based limit.

Outfalls 002, 003, and 004 are for stormwater only. Outfalls 002 and 004 discharge to Pine Creek. Outfall 003 discharges to Mahantango Creek. The facility is classified under SIC Code 201503 (Egg Processing). PaDEP's Stormwater PAG03 General Permit recommends Appendix I for SIC Codes 2011, 2013, 2015 (Animal Handling and Meat Packing Facilities) applies.

Pine Creek has a TMDL that is affected by pollution from non-point source coal mine AMD Metals. To provide a reasonable assurance that reductions in any AMD TMDL can be met, Pennsylvania has adopted various programs. These methods

Approve	Deny	Signatures	Date
X		Bernard Feist (signed) Bernard Feist, P.E. / Environmental Engineer	July 22, 2021
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	8-18-21

Summary of Review

include PADEP's primary efforts to improve water quality through reclamation of abandoned mine lands and through the National Pollution Discharge Elimination System (NPDES) permit program (**for all remaining active mining**).

Funding sources available that are currently being used for projects designed to achieve AMD TMDL reductions include the Environmental Protection Agency (EPA) 319 grant program and Pennsylvania's Growing Greener Program (for watershed restoration and protection in mine-drainage impacted watersheds and abandoned mine reclamation).

Because the pollution sources in the watershed are nonpoint sources, the TMDLs' component makeup will be load allocations (LAs) with waste load allocations (WLAs) for permitted discharges. All allocations will be specified as long-term average daily concentrations. These long-term average concentrations are expected to meet water-quality criteria 99% of the time as required in PA Title 25 Chapter 96.3(c). The following table shows the applicable water-quality criteria for the selected parameters:

Table 3. Applicable Water Quality Criteria

Parameter	*Criterion Value (mg/l)*	*Total Recoverable/Dissolved*
Aluminum (Al)	0.75	Total Recoverable
Iron (Fe)	1.50	30 day average; Total Recoverable
Manganese (Mn)	1.00	Total Recoverable
pH *	6.0-9.0	N/A

In general, DEP establish limits in the draft permit where the effluent concentration exceeds 50% of the WQBEL. For non-conservative pollutants, in general, establish monitoring requirements where the effluent concentration determined is between 25% - 50% of the WQBEL. For conservative pollutants, in general, establish monitoring requirements where the effluent concentration determined is between 10% - 50% of the WQBEL.

Sludge use and disposal description and location(s):

Treatment Unit Description	Method for Handling and Disposal of Solid or Liquid Residue Resulting from Treatment
Lift Station	Hauled by JG Env to Landy Shade Farm land application
Influent Equalization	Hauled by JG Env to Landy Shade Farm land application
Anaerobic Digestion	Hauled by Tri-County to Dornsife land application
Sequencing Batch Reactors	Transferred to Anaerobic Digester
Effluent Equalization and Chlorine Contact	Hauled by Tri-County to Dornsife land application

The existing permit expires on 12/31/2021 and the application was received on 6/28/2021 via Onbase.

The NMS query "Inspections & Inspectors – Inspections – Inspection History by Permit" was run. An Administrative/File Review was done on 03/24/2021 with Violations Noted.

The NMS query "Violations – eFACTS – Open Violations for Client was run. There are currently open violations that must be resolved before the Permit is allowed to be renewed.

PROGRAM SPECIFIC ID	INSP ID	VIOLATION ID	INSPECTION CATEGORY	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR	INSP REGION
PA0009911	2913096	857462	PF	07/11/2019	CSL301	CSL - Unauthorized, unpermitted discharge of industrial wastes to waters of the Commonwealth	SABITSKY,JARED	NERO
PA0009911	3166195	911233	PF	03/24/2021	92A.44	NPDES - Violation of effluent limits in Part A of permit	SABITSKY,JARED	NERO

Summary of Review
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.

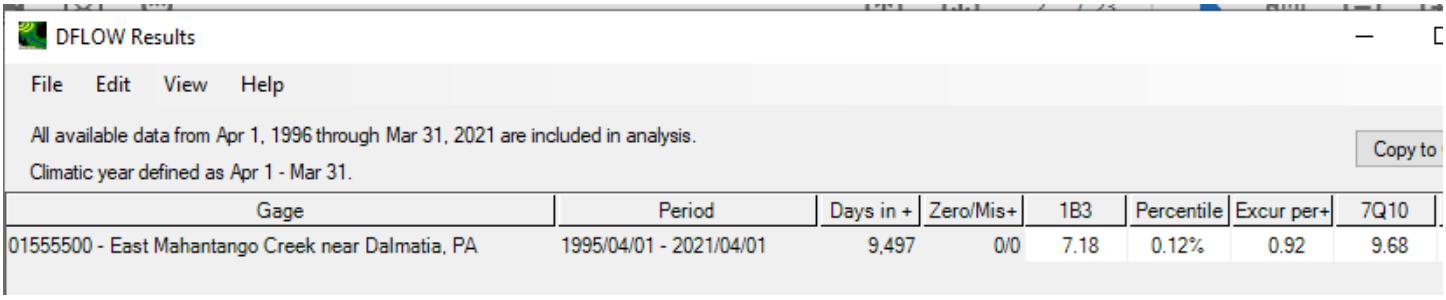
Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.295
Latitude	40.63639	Longitude	-76.69528
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent and IW Process Effluent without ELG		
Receiving Waters	Pine Creek	Stream Code	17208
NHD HUD	2050301	RMI	0.8
Drainage Area	74.3	Yield (cfs/mi^2)	0.06
Q_{7-10} Flow (cfs)	4.5	Q_{7-10} Basis	Dflow USGS 01555500
Elevation (ft)	535	Slope (ft/ft)	0.0036
Watershed No.	6-C	Chapter 93 Class.	CWF
Existing Use	na	Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Metals, Siltation		
Source(s) of Impairment	AMD, Agriculture		
TMDL Status	Final	Name	Pine Creek - Schuylkill County
Nearest Downstream Public Water Supply Intake	CAPITAL REGION WATER		
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	>35 miles

Changes Since Last Permit Issuance: 2021 update - Sewage discharges will include monitoring, at a minimum, for E. Coli, in new and reissued permits, with a monitoring frequency of 1/month for design flows >= 1 MGD, 1/quarter for design flows >= 0.05 and < 1 MGD, 1/year for design flows of 0.002 – 0.05 MGD.

Other Notes:

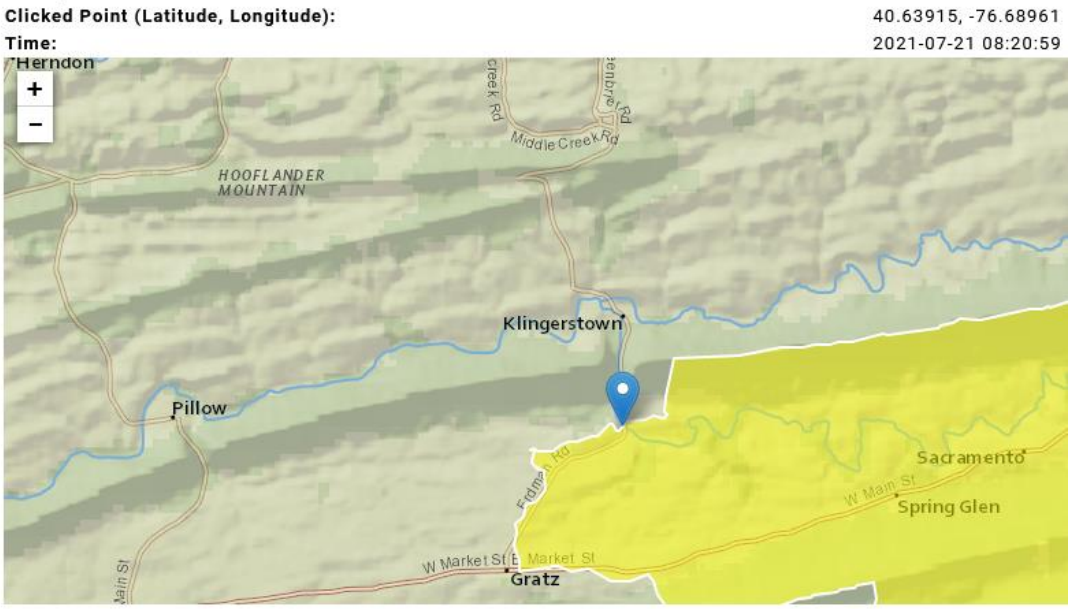
- SIC 201503 Egg Processing -Processing whole and liquid egg products, miscellaneous food products
- WQM Permit No.: 5499201 was issued 05/21/1999
- Submitted Total Hardness Upstream of the Process Wastewater Outfall (mg/L): 116



Gage	Period	Days in +	Zero/Mis+	1B3	Percentile	Excur per+	7Q10
01555500 - East Mahantango Creek near Dalmatia, PA	1995/04/01 - 2021/04/01	9,497	0/0	7.18	0.12%	0.92	9.68

USGS STATION.--01555500 EAST MAHANTANGO CREEK NEAR DALMATIA, PA
LOCATION.--Lat 40`36'40", long 76`54'44", Northumberland County, Hydrologic Unit 02050301, on right bank at bridge on SR 3017, 2.0 mi upstream from mouth, and 3.2 mi south of Dalmatia.
DRAINAGE AREA.--162 square miles. PERIOD OF RECORD.--October 1929 to current year.
Q_{7-10} LowFlowYield (cfs/mi^2)= 9.68/162 =0.06

RMI Outfall 001: 0.8 Pine Creek WRDS: 17208 Elevation 535



Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units
DRNAREA	Drainage Area	74.3	square miles

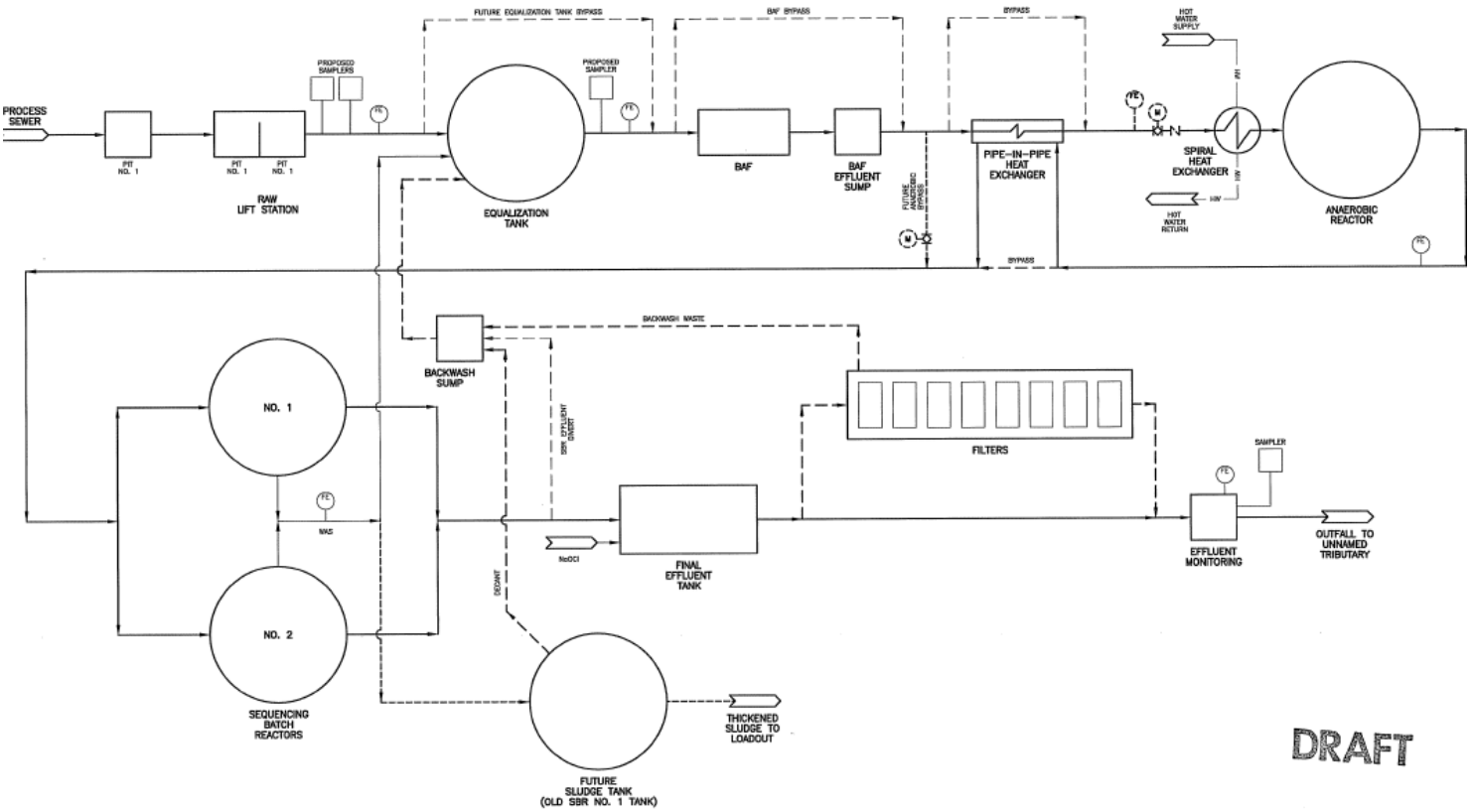
Next Confluence @RMI 0.0 Elevation 531

Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units
DRNAREA	Drainage Area	76.3	square miles

The WWTP process utilizes anaerobic digestion followed by aerobic activated sludge for organic, solids, and nutrient removal. Influent and effluent flows are equalized using discrete equalization processes. Chlorine Contact is used for the Outfall 001's Disinfection. Residue is hauled to Land applications.

Process Flow Chart



Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .295
Latitude 40º 39' 11.00" **Longitude** -76º 41' 43.00"
Wastewater Description: Sewage and IW Process Effluent without ELG

Technology-Based Limitations

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

Parameter	Minimum	Average Monthly	Average Weekly	IMAX	Basis
Flow (MGD)	XXX	Report	Report Max Daily	XXX	§§ 92a.27, 92a.61
CBOD5 (mg/L)	XXX	25	40	50	§ 92a.47
TSS (mg/L)	XXX	30	45	60	§ 92a.47
TRC (mg/L)	XXX	1.0	XXX	2.0	§§ 92a.47-48
NH3-N (mg/L)	XXX	25	XXX	50	BPJ
D.O. (mg/L)	4	XXX	XXX	XXX	BPJ
pH (SU)	6	XXX	XXX	9	§ 92a.47, § 95.2
Total N (mg/L)	XXX	Report	XXX	XXX	§ 92a.61
Total P (mg/L)	XXX	Report	XXX	XXX	§ 92a.61
Fecal Coliform (No./100 ml) (May-Sept)	XXX	200 Geo Mean	XXX	1,000	§ 92a.47
Fecal Coliform (No./100 ml) (Oct-April)	XXX	2,000 Geo Mean	XXX	10,000	§ 92a.47
E. Coli (No./100 ml)*	XXX	XXX	XXX	Report	§ 92a.61

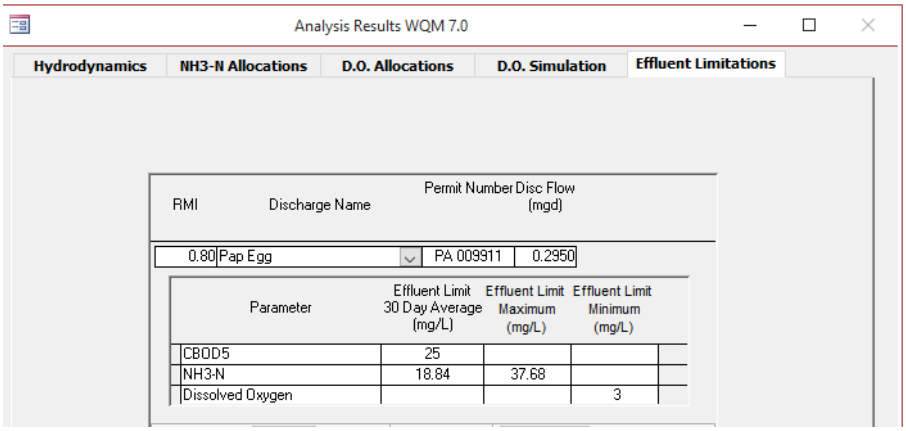
DEP's most recent high-level strategy to address the requirements in the Chesapeake Bay TMDL, Phase 3 Watershed Implementation Plan (WIP), was finalized in 2019.

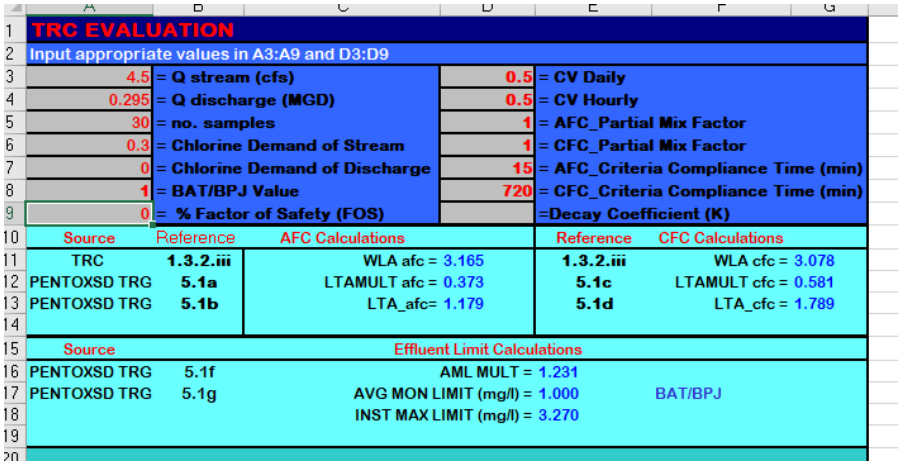
Table 7: Significant IW Facilities That Have Received Final Cap Loads.

NPDES Permit No.	Facility	Latest Permit Issuance Date	Permit Expiration Date	Cap Load Compliance Start Date	TN Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	TN Delivery Ratio	TP Delivery Ratio
PA0009911	Papetti's Acquisition Inc.	12/29/16	12/31/21	10/1/13	8,104	532	0.961	0.436

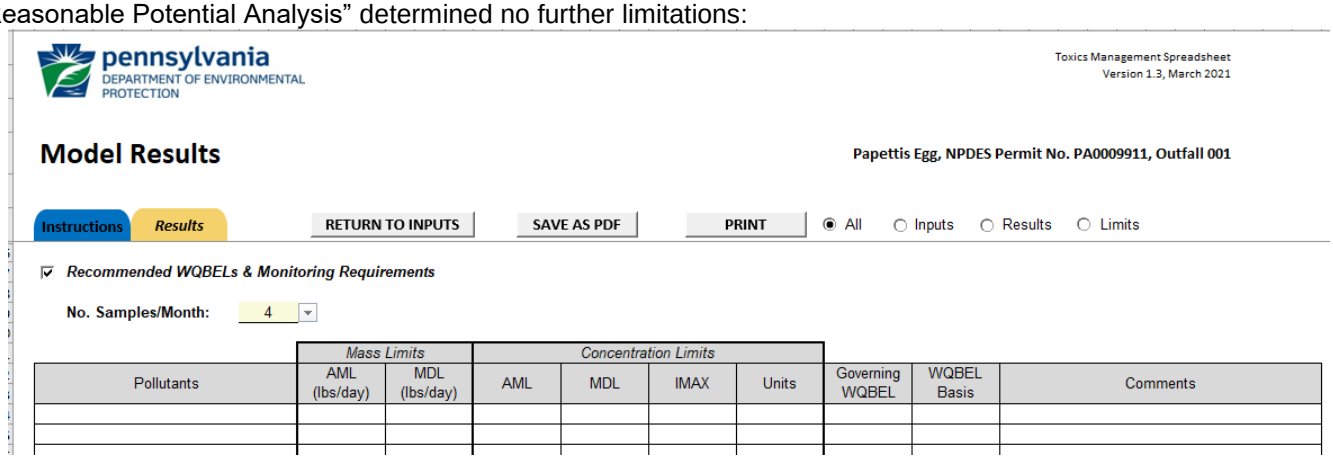
Water Quality-Based Limitations

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





A “Reasonable Potential Analysis” determined no further limitations:



TMS PA0009911.pdf

Anti-Backsliding

Keep all existing Limits

Development of Effluent Limitations

Wastewater Description: Stormwater

Stormwater Outfalls

002 40 39 42 76 41 43 Pine Creek CWF
003 40 39 36 76 42 6 Mahantango Creek CWF
004 40 38 11 76 41 43 UNT Pine Creek CWF

Outfall No.	Entirely Stormwater?	Drainage Area (ft^2)	% Impervious	Description of Materials/Activities in Drainage Area Exposed to Precipitation
002	☒	240,000	0.0	Parking, Tractor Trailer Staging
003	☒	217,500	3.4	Parking, Tractor Trailer Staging
004	☒	266,875	53.0	Parking, Township Road, Driveway

Technology-Based Limitations

The General Permit requirements in Appendix I are the minimum to apply to stormwater discharges associated with industrial activity from Food and Kindred Products facilities as identified by the following SIC Codes: 2011 – 2015, 2021 – 2026, 2032 – 2038, 2041 – 2048, 2051 – 2053, 2061 – 2068, 2074 – 2079, 2082 – 2087, 2091 – 2099 and 2111 – 2141.

Parameter	Monitoring Requirements (1)		Benchmark Values
	Minimum Measurement Frequency (2)	Sample Type	
pH (S.U.)	1 / 6 months	Grab	XXX
5-Day Biochemical Oxygen Demand (BOD5) (mg/L)	1 / 6 months	Grab	XXX
Total Suspended Solids (TSS) (mg/L)	1 / 6 months	Grab	100
Chemical Oxygen Demand (COD) (mg/L)	1 / 6 months	Grab	120
Nitrate + Nitrite-Nitrogen (mg/L)	1 / 6 months	Grab	XXX
Oil and Grease (mg/L)	1 / 6 months	Grab	30

SECTOR-SPECIFIC BMPs

In addition to the BMPs contained in Part C II of PaDEP's current General Permit, the permittee shall implement, at a minimum, all of the following BMPs that are applicable to the processes in place at the facility.

A. Store all dry raw materials, additives and products in enclosed/covered areas; install dust collection and control system for silos, holding bins, etc.

B. Store liquids in tanks with secondary containment and leak detection, where appropriate.

C. Minimize raw water usage for washing products and raw materials; recycle wash water where determined to be feasible.

D. Practice good housekeeping to limit spillage/leakage of residue and provide for prompt clean-up; dispose of rotting fruit and produce promptly.

E. Manage inventories to ensure only short-term supplies of raw materials and products are stored on-site.

F. Limit use of pesticides, insecticides and rodenticides to the maximum extent possible; apply during dry conditions; investigate non- (or least) hazardous alternatives.

G. Wherever possible, enclose/cover animal holding areas; install run-on controls and collect and treat run off, as appropriate.

H. Practice good housekeeping by containing and promptly removing and managing animal manure.

Compliance History

DMR Data for Outfall 001 (from May 1, 2020 to April 30, 2021)

Parameter	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20
Flow (MGD) Average Monthly	0.1137	0.1199	0.1163	0.1284	0.1192	0.1144	0.1157	0.1045	0.1123	0.0897	0.0803	0.0893
Flow (MGD) Daily Maximum	0.1337	0.1477	0.1397	0.1564	0.1324	0.1352	0.1323	0.1322	0.1354	0.1158	0.1165	0.1229
pH (S.U.) Minimum	7.75	7.65	7.61	7.66	7.70	7.85	7.89	7.90	7.93	7.89	7.88	7.78
pH (S.U.) Maximum	8.04	7.99	7.98	7.97	7.99	8.04	8.02	8.07	8.22	8.03	7.97	8.01
TRC (mg/L) Average Monthly	0.76	0.68	0.61	0.89	0.70	0.72	0.69	0.59	0.51	0.53	0.72	0.65
TRC (mg/L) Instantaneous Maximum	1.19	1.90	0.94	1.37	1.02	1.07	1.18	0.86	0.97	0.88	1.55	0.98
CBOD5 (lbs/day) Average Monthly	2.5	8.0	2.3	2.4	2.7	2.6	2.3	2.4	2.0	2.1	5.6	1.7
CBOD5 (lbs/day) Daily Maximum	3.3	22.8	2.9	3.0	3.9	3.8	3.3	3.1	2.2	2.6	15.3	2.0
CBOD5 (mg/L) Average Monthly	2.4	7.8	2.2	2.3	2.8	2.5	2.5	2.5	2.0	2.7	7.1	2.0
CBOD5 (mg/L) Daily Maximum	3.2	22.5	2.7	2.6	4.0	3.4	3.7	3.1	2.1	3.1	17.5	2.0
TSS (lbs/day) Average Monthly	5.3	14.8	4.7	4.3	5.6	6.0	12.2	9.1	5.0	6.5	5.4	4.9
TSS (lbs/day) Daily Maximum	7.1	35.8	5.0	4.6	7.1	11.7	32.0	16.1	5.7	8.2	7.3	5.9
TSS (mg/L) Average Monthly	5.2	14.3	4.5	4.0	5.8	5.8	13.4	9.4	5.2	8.1	7.4	6.1
TSS (mg/L) Daily Maximum	6.8	35.3	4.5	4.0	7.2	10.4	36.0	16.0	6.0	11.2	9.2	9.0
Oil and Grease (mg/L) Average Monthly	5.4	5.1	< 4.9	< 4.9	5.8	< 4.9	5.3	5.7	5.3	5.4	5.6	6.0
Oil and Grease (mg/L) Daily Maximum	6.8	5.7	< 4.9	< 4.9	9.5	< 4.9	5.8	8.0	6.7	6.9	6.0	8.6
Fecal Coliform (CFU/100 ml) Geometric Mean	3	3	1	< 1	1	1	1	1	1	2	1	1
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	400	45	3	< 1	1	1	1	1	2	10	1	1
Nitrate-Nitrite (mg/L) Average Monthly	157.7	141.1	153.6	159.0	156.3	165.9	195.1	185.1	179.9	172.1	151.3	163.4
Nitrate-Nitrite (lbs) Total Monthly	4388	4340	3910	5467	4809	5085	5654	5189	5192	4397	2953	3625
Total Nitrogen (mg/L) Average Monthly	158.8	143.6	154.8	160.0	157.2	167.4	196.5	186.4	180.6	177.0	153.0	166.2

Total Nitrogen (lbs) Effluent Net Total Monthly	4418	4417	3939	5501	4837	5130	5694	5225	5213	4535	2989	3689
Total Nitrogen (lbs) Total Monthly	4418	4417	3939	5501	4837	5130	5694	5225	5213	4535	2989	3689
Total Nitrogen (lbs) Effluent Net Total Annual								**8103**				
Total Nitrogen (lbs) Total Annual								66931				
Ammonia (lbs/day) Average Monthly	0.35	0.33	0.19	0.21	0.20	0.25	0.12	0.10	0.10	0.26	0.16	0.21
Ammonia (lbs/day) Daily Maximum								0.13	0.15	0.81	0.49	0.58
Ammonia (mg/L) Average Monthly	0.40	0.35	0.21	0.19	0.21	0.25	0.13	0.10	0.11	0.30	0.23	0.27
Ammonia (mg/L) Daily Maximum								0.13	0.19	0.85	0.56	0.62
Ammonia (lbs) Total Monthly	10	10	5	6	6	8	4	3	3	8	5	6
Ammonia (lbs) Total Annual								132				
TKN (mg/L) Average Monthly	1.1	2.5	1.2	1.0	0.9	1.5	1.4	1.3	0.8	4.9	1.8	2.8
TKN (lbs) Total Monthly	30	77	28	34	28	1.5	40	36	21	138	36	64
Total Phosphorus (lbs/day) Average Monthly	22.3	22.9	21.1	22.3	21.5	22.3	24.6	25.7	25.0	19.9	18.2	25.1
Total Phosphorus (mg/L) Average Monthly	24.0	23.1	22.7	20.2	21.7	21.9	25.9	27.5	26.8	24.2	27.6	35.0
Total Phosphorus (lbs) Effluent Net Total Monthly	669	709	591	690	666	668	762	772	774	618	546	778
Total Phosphorus (lbs) Total Monthly	669	709	591	690	666	668	762	772	774	618	546	778
Total Phosphorus (lbs) Effluent Net Total Annual								**530**				
Total Phosphorus (lbs) Total Annual								10619				