pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0100315**
Facility Type	**Non-Municipal**	APS ID	**1007564**
Major / Minor	**Minor**	Authorization ID	**1298641**

Applicant and Facility Information

Applicant Name	**Farma Parks Inc.**	Facility Name	**Farma Parks MHP**
Applicant Address	87 Hughey Road	Facility Address	87 Hughley Road
	Greenville, PA 16125-9617		Greenville, PA 16125
Applicant Contact	John May	Facility Contact	
Applicant Phone	(724) 253-4535	Facility Phone	
Client ID	74561	Site ID	264067
Ch 94 Load Status	Not Overloaded	Municipality	Perry Township
Connection Status	No Limitations	County	Mercer
Application Received	November 18, 2019	EPA Waived?	Yes
Application Accepted	December 18, 2019	If No, Reason	

Purpose of Application: NPDEs renewal.

Summary of Review

The only reported open violation notice is dated September 29, 2014 is by Safe Water requiring a public notice.

New TRC requirements are proposed. The change is based on discharge chlorine demand no longer being used in TRC modelling. TRC monitoring for effluents having less than 0.1-mg/L TRC are to be analyzed using Standard Methods Low Level Amperometric Titration.

Because the self-monitoring submissions show the monthly average TRC at nearly 0.2-mg/L or approximately twice the proposed monthly average a compliance schedule ending three years after issuance is proposed.

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		William H. Mentzer, P.E. Environmental Engineering Specialist	January 8, 2020
X		Justin C. Dickey, P.E. Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.025
Latitude DP	41º 24' 27.60"	Longitude DP	-80º 15' 37.23"
Latitude NHD	41º 24' 24.68"	Longitude NHD	-80º 15' 34.97"
Quad Name	Greenville East	Quad Code	0703
Wastewater:	Treated mobile home park domestic wastes		

Receiving Waters	Unnamed Tributary to Little Shenango	Stream Code	36262
NHD Com ID	130027112	RMI	0.73 (Node RMI 0.12)
Drainage Area	0.29	Yield (cfs/mi^2)	0.071
Q_{7-10} Flow (cfs)	0.02	Q_{7-10} Basis	Little Shenango River
Elevation (ft)	1160.00	Slope (ft/ft)	0.04735
Watershed No.	20-A	Chapter 93 Class.	TSF
Existing Use	**statewide**	Existing Use Qualifier	none
Exceptions to Use	none	Exceptions to Criteria	none
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)	7.8	Previous WQPR
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake		Greenville Borough	
PWS Waters	Little Shenango River	Flow at Intake (cfs)	NA
PWS RMI	0.96	Distance from Outfall (mi)	13.03

Changes Since Last Permit Issuance: none

Other Comments: No down stream water supply impairment is expected.

Treatment Facility Summary				
Treatment Facility Name: Farma Parks MHP				
WQM Permit No.	**Issuance Date**			
43795404	7/13/1979			
4389412	4/30/1990			
4301424	2/8/02			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Tertiary	Extended Aeration With Solids Removal	Hypochlorite	0.025
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.025	42.5	Not Overloaded	Aerobic Digestion	Other WWTP

Changes Since Last Permit Issuance: none

Other Comments: treatment is equalization, extended aeration, settling. chemical addition, intermittent sand filtration and chlorination.

	Influent					Effluent							
	MGD	**PPD**	**PPD**	**PPD**	**#**	**PPD**	**PPD**	**PPD**	**#**	**mg/L**	**mg/L**	**mg/L**	**#**
An Ave	**0.023**												
An Ave	**2018**	**0.00617**											
An Ave	**2017**	**0.00538**											
An Ave	**2016**	**0.00533**											
High Mon	**June**	**0.00985**											
pH										**6.8**		**7.34**	
TRC											**0.1**	**0.20**	
Fecal Coliform												**10**	
CBOD5												**< 4.0**	
TSS												**< 5**	
Ammonia-N												**< 0.3**	

Data is incompete when compared to self-monitoring submissions.

Reported chemicals:
Aluminum sulfate
Sanuril tablets
Dechlor tablets

Compliance History

DMR Data for Outfall 001 (from November 1, 2018 to October 31, 2019)

Parameter	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18
Flow (MGD) Average Monthly	0.00352	0.00617	0.00538	0.00715	0.00986	0.00583	0.0067	0.00499 5	0.00465 1	0.00531 5	0.00549 4	0.00451 0
pH (S.U.) Minimum	6.8	6.9	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
pH (S.U.) Maximum	7.1	7.1	7.1	7.2	7.2	7.2	7.2	7.2	7.1	7.2	7.2	7.2
DO (mg/L) Minimum	6.1	7.0	7.0	6.2	6.2	5.8	6.0	6.0	6.0	6.9	7.0	5.0
TRC (mg/L) Average Monthly	**0.17**	**0.14**	**0.17**	**0.21**	**0.22**	**0.26**	**0.23**	**0.16**	**0.17**	**0.16**	**0.14**	**0.16**
CBOD5 (mg/L) Average Monthly	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TSS (mg/L) Average Monthly	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Fecal Coliform (CFU/100 ml) Geometric Mean	< 10.0	10.0	10.0	25.71	11.4	33.2	10.0	10.0	< 10.0	10.0	10.0	41.2
Total Nitrogen (mg/L) Average Monthly	32.9	< 1.25	23.0	18.73	< 1.25	< 1.25	14.65	< 1.25	13.95	25.3	26.5	12.8
Ammonia (mg/L) Average Monthly	< 0.30	< 0.30	< 0.30	1.36	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	0.425	2.7
Total Phosphorus (mg/L) Average Monthly	0.422	0.641	0.595	0.496	0.311	0.2725	0.211	0.141	0.235	0.195	0.224	0.344

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.025
Latitude 41º 24' 27.60" **Longitude** -80º 15' 37.23"
Wastewater 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)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	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)
DO	4.0			BPJ

Water Quality-Based Limitations

A "Reasonable Potential Analysis" based on sewage determined the following parameters were candidates for limitations: phosphorus, CBOD5, DO, ammonia and TRC.

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

Parameter				Limit (mg/l)	SBC	Model		
phosphorus			1.0	2.0	NA		1.0	2.0
TRC			0.1				0.087	0.283
Ammonia	summer		1.5	3.0			1.89	3.78
	winter		4.5	9.0				
DO		5.0				5.0		

Comments:
Phosphorus requirements are from the 1998 Lake Trophic Survey, Shenango River Reservoir. De-chlorination is present. The self-monitoring reports do not show compliance with the proposed limitations. Limitation rounding determines the monitoring procedure as the Standard Methods Low Level Amperometric Titration should be used when TRC is less than 0.1-mg/L.

Best Professional Judgment (BPJ) Limitations

Comments: NA

Anti-Backsliding

As the facility is in compliance with its current NPDES permit requirements backsliding was not considered.

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 three years after permit issuance.

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/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.3	XXX	0.7	1/day	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30	XXX	60	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9.0	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3.0	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	1.0	XXX	2.0	2/month	8-Hr Composite

Compliance Sampling Location: Outfall 001 after disinfection.

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: three years after permit issuance 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/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.1	XXX	0.3	1/day	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30	XXX	60	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9.0	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3.0	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	1.0	XXX	2.0	2/month	8-Hr Composite

Compliance Sampling Location: Outfall 001 after disinfection