pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0112534**
Facility Type	**Non-Municipal**	APS ID	**992225**
Major / Minor	**Minor**	Authorization ID	**1271591**

Applicant and Facility Information

Applicant Name	**Meadows at Watsontown LLC**	Facility Name	**The Meadows at Watsontown**
Applicant Address	18 Albatross Drive	Facility Address	1900 Seagrave Drive
	Watsontown, PA 17777-9732		Watsontown, PA 17777-7915
Applicant Contact	Raymond McGill	Facility Contact	Victor Derr
Applicant Phone	(570) 263-0310	Facility Phone	(570) 971-1774
Client ID	316958	Site ID	242491
Ch 94 Load Status	Not Overloaded	Municipality	Delaware Township
Connection Status	No Limitations	County	Northumberland
Date Application Received	April 29, 2019	EPA Waived?	Yes
Date Application Accepted	May 6, 2019	If No, Reason	

Purpose of Application: Application for the renewal of the existing individual NPDES permit.

Summary of Review

The Meadows at Watsontown has submitted an application for the renewal of the existing NPDES Permit PA0112534 for the Department's review. 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		Jonathan P. Peterman / Project Manager	February 19, 2020
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.053
Latitude	41º 7' 33.52"	Longitude	-76º 50' 34.27"
Quad Name	Muncy	Quad Code	0931
Wastewater Description:	Sewage Effluent		
Receiving Waters	Delaware Run (WWF)	Stream Code	19240
NHD Com ID	66917509	RMI	4.62
Drainage Area	4.52	Yield (cfs/mi^2)	0.223
Q_{7-10} Flow (cfs)	1.0	Q_{7-10} Basis	Stream Gage No.1553130
Elevation (ft)	505	Slope (ft/ft)	0.003
Watershed No.	10-D	Chapter 93 Class.	WWF
Existing Use	WWF	Existing Use Qualifier	N/A
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	SILTATION		
Source(s) of Impairment	AGRICULTURE		
TMDL Status	Final	Name	Delaware Run Watershed TMDL
Nearest Downstream Public Water Supply Intake	PA American White Deer		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	728
PWS RMI	10.5	Distance from Outfall (mi)	11

Changes Since Last Permit Issuance: The updated Q_{7-10} data was obtained from the updated stream gage information obtained from *Stuckey, M.H., and Roland, M.A., 2011, Selected Streamflow Statistics for Streamgage Locations In and Near Pennsylvania*. Given that there are no stream gages located downstream of the discharge location, a simple comparative stream analysis is needed. This analysis reveals that the Q_{7-10} is 1.0 cfs. Q_{7-10} calculations are attached in Appendix A.

Other Comments: None.

Treatment Facility Summary		
Treatment Facility Name: The Meadows at Watsontown		
WQM Permit No.	**Issuance Date**	**Comments**
4989406	1/9/1990	Original construction of 2nd treatment train. (0.033 MGD)
4976402	7/30/1976	Original construction of 1st treatment train. (0.02 MGD)

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	Hypochlorite	0.053
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.053	110	Not Overloaded	None	Landfill

Treatment System Components:
- One (1) Wet Well / Lift Station.
- One (1) Submersible Pump.
- One (1) Equalization Tank.
- One (1) Splitter Box.
- Two (2) Aeration Tanks.
- Two (2) Clarifiers.
- One (1) Tablet Erosion Chlorine Disinfection System.
- Two (2) Chlorine Contact Tanks.
- One (1) Outfall 001.
- Two (2) Sludge Holding Tanks.

Changes Since Last Permit Issuance: None.
Other Comments: None.

TMDL Impairment

Delaware Run Watershed TMDL
The pollutant causing designated use impairments in the Delaware Run Watershed has been identified as sediment. The source listed as agricultural. At present, there are no point source contributions within the segments addressed in this TMDL. It can be assumed that the discharge from this facility will not contribute to an in-stream excursion. No effluent limits or further TMDL review will be required.

Chesapeake Bay Requirements

Since this facility's annual average design flow is 0.053 MGD, the permittee will be required to monitor and report TN and TP throughout the permit term at a frequency no less than annually in accordance with the Phase II WIP Chesapeake Bay Strategy for Phase V facilities (0.002 MGD to 0.2 MGD) unless 1) the facility has already conducted at least two years of nutrient monitoring and 2) a summary of the monitoring results are included in the next permit's fact sheet. The previous permit contained the Chesapeake Bay Monitoring requirements and the required sampling has been conducted. Since the permittee conducted this monitoring in the previous permit term and the data is summarized in the eDMR data section of the fact sheet below, the conditions have been met and Chesapeake Bay monitoring will no longer be required.

Anti-Backsliding

In accordance with 40 CFR 122.44(l)(1) and (2), this permit does not contain effluent limitations, standards, or conditions that are less stringent than the previous permit.

Existing Effluent Limitations and Monitoring Requirements

Existing Limits – Outfall 001

Discharge Parameter	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
	Monthly Average	Daily Maximum	Minimum	Average Monthly	Average Weekly	Instantaneous Maximum	Minimum Frequency	Sample Type
Flow (MGD)	Report	Report					1/ Week	Measured
C-BOD_5				25		50	2/ Month	Grab
TSS				30		60	2/ Month	Grab
TRC				1.0		2.3	1/ Day	Grab
NH3-N (5/1-10/31)				3.0		6.0	2/ Month	Grab
NH3-N (11/1-4/30)				6.0		18.0		
D.O.				Report			1/ Day	Grab
pH (Std. Units)			6.0			9.0	1/ Day	Grab
Fecal Coliforms (5/1-9/30)	200 colonies/100 ml as a geometric mean					1,000	2/ Month	Grab
Fecal Coliforms (10/1-4/30)	2,000 colonies/100 ml as a geometric mean					10,000		
Total Nitrogen	Report Annual Average	Report Total Annual		Report Annual Average			1/ Year	Grab
Total Phosphorous	Report Annual Average	Report Total Annual		Report Annual Average			1/ Year	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 0.053 MGD.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.053
Latitude 41º 7' 33.30" **Longitude** -76º 50' 34.30"
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)

Water Quality-Based Limitations

To establish whether or not water-quality based effluent limitations (WQBELs) are required, the Department models in-stream conditions. In order to determine limitations for CBOD5, ammonia-N and dissolved oxygen, the Department utilizes the WQM 7.0 v1.0b model and in order to determine limitations for toxics, the Department utilizes the PENTOXSD v2.0d model.

WQM 7.0 for Windows, Version 1.0b, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen

Given that there have been no changes to the facility, the discharge, or the receiving stream, the previous modeling results will be utilized. The model previously was run using the Q7-10 stream flow, background water quality, average annual design flow, and other discharge characteristics. The existing water technology-based limits for $CBOD_5$ (25 mg/l) and water quality-based NH3-N (3.0 mg/l) were used as inputs for the modeling. The DO minimum daily average criterion from §93.7 (5.0 mg/L for WWF) was used for the in-stream objective for the model. The summary of the output is as follows:

Parameter	Effluent Limit		
	30 Day Average	Maximum	Minimum
CBOD5	25	N/A	N/A
Ammonia-N	3.0	6.0	N/A
Dissolved Oxygen	N/A	N/A	3

The previous model did not recommend more stringent water-quality based effluent limitations with regards to CBOD5, ammonia-nitrogen, and dissolved oxygen. Refer to the Appendix for the previous WQM 7.0 inputs and results. The existing effluent limits will remain.

Best Professional Judgment (BPJ) Limitations

See D.O. section below.

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 the abovementioned 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) and/or BPJ.

Proposed Limits - Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date

Discharge Parameter	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
	Monthly Average	Daily Maximum	Minimum	Average Monthly	Average Weekly	Instantaneous Maximum	Minimum Frequency	Sample Type
Flow (MGD)	Report	Report					1/ Week	Measured
C-BOD_5				25		50	2/ Month	Grab
TSS				30		60	2/ Month	Grab
TRC				0.5		1.6	1/ Day	Grab
NH3-N (5/1-10/31)				3.0		6.0	2/ Month	Grab
NH3-N (11/1-4/30)				6.0		18.0		
D.O.				Report			1/ Day	Grab
pH (Std. Units)			6.0			9.0	1/ Day	Grab
Fecal Coliforms (5/1-9/30)	200 colonies/100 ml as a geometric mean					1,000	2/ Month	Grab
Fecal Coliforms (10/1-4/30)	2,000 colonies/100 ml as a geometric mean					10,000		

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.053 MGD.

Effluent Limit Determination for Outfall 001

General Information
All of the limits proposed above are consistent with other permits issued for Phase V wastewater treatment plants in the region. The existing monitoring frequencies and sample types for these parameters generally correspond with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3 and will remain.

Flow
Reporting of the daily maximum flow is consistent with monitoring requirements for other treatment plants of this size.

Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)
The results of the WQM 7.0 model show that the previously applied secondary treatment standards (25 PA Code §92a.47 (a) (1&2)) for $CBOD_5$ are protective of water quality.

Total Suspended Solids (TSS)
The previously applied technology based secondary treatment standards (25 PA Code §92a.47 (a) (1&2)) for TSS will remain as well.

pH
CFR Title 40 §133.102(c) and 25 PA Code §95.2(1) provide the basis of effluent limitations for pH. The existing limits will remain.

Fecal Coliforms
The existing fecal coliform limits with I-max limits were updated from the previous Chapter 92 code to correspond with what is specified in the updated 25 PA Code § 92a.47 (a)(4)&(5) and will remain.

Ammonia-Nitrogen (NH3-N)
The results of the WQM 7.0 model show that the previously applied water qualiity for $CBOD_5$ are protective of water quality.

Dissolved Oxygen (DO)
Given results of the WQM 7.0 model, a discharge of effluent from this facility with a DO concentration of 3 mg/l would not result in an exceedance of water quality requirements for this stream. However, the Department previously established a monitor only requirement. The monitoring requirement was established to ensure that the facility's discharge does not cause or contribute to an in-stream excursion below water quality standards for DO in the receiving stream and will remain.

Total Residual Chlorine (TRC)
In accordance with 25 Pa. Code 92a.48(b)(2), a best available technology (BAT) value of 0.5 mg/l was used in lieu of the existing effluent limit (1.0 mg/L) in the TRC Spreadsheet. The attached TRC model indicates that the technology based effluent limits of 0.5 mg/L (Average Monthly) and 1.6 mg/L (Instantaneous Maximum) are protective of water quality. The facility currently utilizes tablet chlorination as a disinfection method. It has been proven that this method, if operated properly and maintained, can effectively and consistently meet these effluent requirements.

As stated above, 25 PA Code § 92a.48(b)(2) provides a BAT limit of 0.5 mg/L unless a site-specific study has been conducted. Given that a site-specific TRC study has not been provided for this facility, the BAT limit will be established. Historical DMR data from the previous year was reviewed to determine if the facility will require a compliance schedule to comply with the proposed effluent limits. The DMR results are listed in the compliance review below.

Based on the data, it appears that the facility can't currently meet the proposed TRC effluent limits (0.50 mg/L and 1.6 mg/l) on a majority basis. Therefore, the permit will require a 2-year compliance schedule in order for the facility to comply with the decreased limits.

Other Comments: All effluent limits are appropriate and typical for this facility type.

Compliance History

Summary of Inspections -The last inspection of the facilities was conducted on 9/4/19 by the Department. The inspection report indicates that the facility was operating normally.

WMS Query Summary - A WMS Query was run at *Reports - Violations & Enforcements – Open Violations for Client Report* to determine whether there are any unresolved violations associated with the client that will affect issuance of the permit (per CSL Section 609). This query revealed no open violations.

eDMRs Summary - Upon review of the eDMR's, the facility has been in compliance with the existing effluent limits.

Attachments


Meadows
Appendices

Compliance History

DMR Data for Outfall 001 (from January 1, 2019 to December 31, 2019)

Parameter	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19
Flow (MGD) Average Monthly	0.034166	0.027896	0.026541	0.008439	0.009746	0.033847	0.046864	0.044919	0.033785	0.040391	0.046658	0.035818
Flow (MGD) Daily Maximum	0.091955	0.131701	0.180173	0.01399	0.017863	0.172886	0.210069	0.206684	0.128034	0.16338	0.154309	0.089738
pH (S.U.) Minimum	7.0	6.7	6.5	6.3	6.5	7.4	7.3	7.2	6.9	7.3	7.4	7.5
pH (S.U.) Maximum	7.5	7.3	7.4	7.7	7.6	7.8	7.7	7.9	7.8	8.0	8.1	8.2
DO (mg/L) Minimum	4.0	2.2	3.1	1.5	1.4	1	0.7	1.1	2.2	3.3	4.9	3.5
TRC (mg/L) Average Monthly	0.4	0.3	0.4	0.6	0.5	0.4	0.5	0.2	0.3	0.4	0.5	0.7
TRC (mg/L) Instantaneous Maximum	1.2	0.56	1.0	2.2	1.36	1.64	1.78	1.09	2.2	2.2	2.2	2.2
CBOD5 (mg/L) Average Monthly	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
CBOD5 (mg/L) Instantaneous Maximum	< 3.0	< 3.0	3.95	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	3.4
TSS (mg/L) Average Monthly	9.0	4.2	2.0	2.0	< 2.0	< 2.0	6.0	2.0	4.0	5.0	9.0	5.0
TSS (mg/L) Instantaneous Maximum	9.6	4.2	3.6	3.0	3.2	3.0	7.0	2.8	4.0	5.4	13.0	5.2
Fecal Coliform (CFU/100 ml) Geometric Mean	< 6	2	5	5	3	< 1	< 2	67	< 1	5	< 1	< 13
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	38.4	3.1	20.3	12.1	6.3	2	4.2	866	1	7.4	1	167.4
Ammonia (mg/L) Average Monthly	< 2.4	< 0.10	< 0.1	< 0.10	< 0.1	< 1.6	< 0.3	< 0.1	< 0.3	< 0.1	< 0.7	5.6
Ammonia (mg/L) Instantaneous Maximum	4.6	< 0.10	< 0.1	< 0.10	< 0.1	3.16	0.45	0.1	< 0.5	< 0.1	1.23	7.6

Chesapeake Bay – eDMR Monitoring Results (2017 to 2019)

PERMIT	MONITORING_START_DATE	MONITORING_END_DATE	REPORT_FREQUENCY	DUE_DATE	DMR_RECEIVED_DATE	PARAMETER	LOAD_UNITS	LOAD_1_VALUE	LOAD_1_LIMIT	LOAD_2_VALUE	LOAD_2_SBC	CONC_UNITS	CONC_2_VALUE	CONC_2_LIMIT	SAMPLE_FREQUENCY	SAMPLE_TYPE
PA0112534	1/1/2017	12/31/2017	Annually	1/28/2018	9/19/2017	Total Nitrogen	lbs/day	3	Monitor and Report			mg/L	26.44	Monitor and Report	1/year	Grab
PA0112534	1/1/2018	12/31/2018	Annually	1/28/2019	8/20/2018	Total Nitrogen	lbs/day	< 4	Monitor and Report			mg/L	37.37	Monitor and Report	1/year	Grab
PA0112534	1/1/2019	12/31/2019	Annually	1/28/2020	8/14/2019	Total Nitrogen	lbs/day	< 21	Monitor and Report			mg/L	< 3.98	Monitor and Report	1/year	Grab
PA0112534	1/1/2018	12/31/2018	Annually	1/28/2019	8/20/2018	Total Nitrogen (Total Load, lbs)	lbs			< 134	Total Annual				1/year	Calculatio
PA0112534	1/1/2019	12/31/2019	Annually	1/28/2020	8/14/2019	Total Nitrogen (Total Load, lbs)	lbs			< 175	Total Annual				1/year	Calculatio
PA0112534	1/1/2017	12/31/2017	Annually	1/28/2018	9/19/2017	Total Phosphorus	lbs/day	0.3	Monitor and Report			mg/L	3.2	Monitor and Report	1/year	Grab
PA0112534	1/1/2018	12/31/2018	Annually	1/28/2019	8/20/2018	Total Phosphorus	lbs/day	0.8	Monitor and Report			mg/L	7.26	Monitor and Report	1/year	Grab
PA0112534	1/1/2019	12/31/2019	Annually	1/28/2020	8/14/2019	Total Phosphorus	lbs/day	5	Monitor and Report			mg/L	0.914	Monitor and Report	1/year	Grab
PA0112534	1/1/2018	12/31/2018	Annually	1/28/2019	8/20/2018	Total Phosphorus (Total Load, lbs)	lbs			26	Total Annual				1/year	Calculatio
PA0112534	1/1/2019	12/31/2019	Annually	1/28/2020	8/14/2019	Total Phosphorus (Total Load, lbs)	lbs			41	Total Annual				1/year	Calculatio

Tools and References Used to Develop Permit	
☒	Q7-10 Analysis and Stream Data (see Appendix **A**)
☒	WQM 7.0 Model Input/Output (see Appendix **B**)
☐	Toxics Screening Analysis v2.4 (see Appendix)
☐	PENTOXSD v2.0d Model Input/Output (see Appendix)
☒	Facility Map and Schematic (see Appendix **D**)
☒	TRC Evaluation Spreadsheet (see Appendix **C**)
☐	Lake Model Output (see Appendix)
☐	WETT Spreadsheet (see Appendix)
☒	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☒	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☒	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☒	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☒	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
☒	Design Stream Flows, 391-2000-023, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☒	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☒	SOP: New and Reissuance Sewage Individual NPDES Permit Applications - Version 1.8 – 10/11/13
☒	SOP: Establishing Effluent Limitations for Individual Sewage Permits– Version 1.5 - 8/23/13
☐	Other: