pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0035688**
Facility Type	**Municipal**	APS ID	**987174**
Major / Minor	**Minor**	Authorization ID	**1262855**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Potter Township**	Facility Name	**Potter Township CC Estates**
Applicant Address	124 Short Road	Facility Address	115 Park Drive
	Spring Mills, PA 16875-9326		Centre Hall, PA 16828
Applicant Contact	Dick Decker	Facility Contact	Bud Brooks
Applicant Phone	(814) 364-9176	Facility Phone	(814) 280-2252
Client ID	35324	Site ID	461404
Ch 94 Load Status	Not Overloaded	Municipality	Potter Township
Connection Status	No Limitations	County	Centre
Date Application Received	February 15, 2019	EPA Waived?	Yes
Date Application Accepted	February 28, 2019	If No, Reason	

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

Summary of Review

Potter Township has submitted an application for the renewal of the existing NPDES Permit PA0035688 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	January 8, 2020
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.035
Latitude	40º 47' 52.46"	Longitude	-77º 43' 44.78"
Quad Name	Centre Hall	Quad Code	224
Wastewater Description:	Sewage Effluent		

Receiving Waters	Cedar Run (HQ-CWF)	Stream Code	23059
NHD Com ID	67180100	RMI	3.1600
Drainage Area	5.88 mi^2	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	0 – Intermittent Stream	Q_{7-10} Basis	N/A
Elevation (ft)	1160	Slope (ft/ft)	N/A
Watershed No.	9-C	Chapter 93 Class.	CWF, MF
Existing Use	HQ-CWF(HIGH QUALITY-COLD WATER FISHES)	Existing Use Qualifier	Designated Class A Wild Trout
Exceptions to Use	None.	Exceptions to Criteria	None.
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	N/A	Name N/A	

Nearest Downstream Public Water Supply Intake	PA American Water White Deer		
PWS Waters	West Branch of Susquehanna River	Flow at Intake (cfs)	682
PWS RMI	10.5	Distance from Outfall (mi)	96

Changes Since Last Permit Issuance: None.

Other Comments: Since the receiving stream in intermittent, the model was run at the point of first use (POFU) using a downstream Stream Gage No. 1546400 Spring Creek at Houserville, Pa. See Appendix A for details.

Treatment Facility Summary

Treatment Facility Name: Potter Township Country Club Park WWTP

WQM Permit No.	Issuance Date	Comments
1409401 Letter Amendment	1/14/2016	Addition of flow meter on fine screen.
1409401	7/23/2009	Replacement of existing STP and new force main and pump station.
1406405	5/23/2006	New control building and tertiary filter.
1470408 T-1	7/9/1997	Transfer to the township.
1470408	11/16/1970	Original construction.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Activated Sludge	Ultraviolet	
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.035	112	Not Overloaded		

Treatment System Components:
- One (1) Gravity Collection System.
- One (1) Pump Station.
- One (1) Influent EQ Basin.
- One (1) Comminutor/Bar Screen.
- One (1) Anoxic Tank.
  - Two (2) Mixers.
- Two (2) Aeration Tanks.
- Two (2) Clarifiers.
- One (1) Wet Well.
- One (1) Microscreen (20 micron) Filtration System.
- One (1) UV Disinfection System.
  - Six (6) UV Bulbs.
- One (1) Outfall 001.

- One (1) Aerobic Digester.

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

TMDL Impairment

The receiving stream (Cedar Run) is attaining it's use and no TMDL exists for this stream segment. No further review is required.

Chesapeake Bay Requirements

Since this facility's annual average design flow is 0.035 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 fact sheet below, the conditions have been met and Chesapeake Bay monitoring will no longer be required.

Chesapeake Bay – eDMR Monitoring Results (2014 to 2019)

Date	Total Nitrogen (Avg. Mo.)		Total Phosphorus (Avg. Mo.)	
	(mg/L)	(lbs/day)	(mg/L)	(lbs/day)
2014	44.65	3	3.24	0.2
2015	6.85	0.6	5.02	0.4
2016	26.63	3	5.86	0.6
2016	26.63	3	5.83	0.6
2017	15.03	2	6.78	0.6
2018	8.32	0.4	8.6	0.4
2019	0.95	0.1	1.04	0.1

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.

Trucked-In Waste

The application indicates that the facility does not receive hauled-in wastes.

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/ Day	Calculation
C-BOD_5	2.9	4.4		10	15	20	2/ Month	8-Hr. Comp.
BOD_5 Raw Sewage Influent	Report	Report		Report			2/ Month	8-Hr. Comp
TSS	5.8	8.8		20	30	40	2/ Month	8-Hr. Comp.
TSS Raw Sewage Influent	Report	Report		Report			2/ Month	8-Hr. Comp
UV Intensity			Report				6/ Week	Metered
NH3-N (5/1-9/30)	0.9	1.4		3	4.5	6	2/ Month	8-Hr. Comp
NH3-N (10/1-4/30)	2.7	4.0		9	13.5	18		
D.O.			Report				1/ Week	Grab
pH (Std. Units)			6.0			9.0	6/ Week	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			Report			1/ Year	Grab
Total Phosphorous	Report			Report			1/ Year	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 0.035 MGD.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.035
Latitude 40º 47' 53.45" **Longitude** -77º 43' 45.17"
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
The model was run using the Q7-10 stream flow at the POFU, background water quality, average annual design flow, and other discharge characteristics. The existing water technology-based effluent limits for $CBOD_5$ (10 mg/l) and NH3-N (3 mg/l) were used as inputs for the modeling. The DO minimum daily average criterion from §93.7 (8.0 mg/L for HQ-CWF) 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	10	N/A	N/A
Ammonia-N	3	6	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/ Day	Calculation
C-BOD_5	2.9	4.4		10	15	20	2/ Month	8-Hr. Comp.
BOD_5 Raw Sewage Influent	Report	Report		Report			2/ Month	8-Hr. Comp
TSS	5.8	8.8		20	30	40	2/ Month	8-Hr. Comp.
TSS Raw Sewage Influent	Report	Report		Report			2/ Month	8-Hr. Comp
UV Intensity (%)			Report				6/ Week	Metered
NH3-N (5/1-9/30)	0.9	1.4		3	4.5	6	2/ Month	8-Hr. Comp
NH3-N (10/1-4/30)	2.7	4.0		9	13.5	18		
D.O.			Report				6/ Week	Grab
pH (Std. Units)			6.0			9.0	6/ Week	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 0.035 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 associated mass-based limits (lbs/day) for all parameters were based on the formula: design flow (average annual) (MGD) x concentration limit (mg/L) at design flow x conversion factor (8.34). All effluent limits were then rounded down in accordance with the rounding rules established in the *Technical Guidance for the Development and Specification of Effluent Limitations (362-0400-001)*, Chapter 5 - Specifying Effluent Limitations in NPDES Permits. 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. During the previous review, it was determined by the Department that monitoring at a frequency of 6/ Week in lieu of 1/ Day would be acceptable for UV and pH. Given that there is no history of non-compliance with effluent limitations over the past two years according to DMR data for these parameters, and the existing monitoring frequencies are less stringent than Table 6-3, the existing frequencies will remain. DO monitoring will be 6/ Week in lieu of 1/ week to correspond with pH and UV monitoring.

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 technology-based advanced treatment requirements for $CBOD_5$ are protective of water quality and will remain.

Total Suspended Solids (TSS)
The previously applied technology-based advanced treatment requirements 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.

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 WQM 7.0 modeling results for NH3-N indicate that the existing average monthly limit of 3 mg/L would be 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.

UV Intensity ($\mu W/cm^2$)
The existing permit has the permittee reporting intensity ($\mu W/cm^2$) which is an appropriate unit for this parameter and will remain in this permit for now. The permittee indicates that the existing meter only reports in percentage of intensity. The permittee will be encouraged to explore alternatives, such as conversion to standard units, during the comment period. This shall be noted on the cover letter of the draft permit and operations will be carbon copied on the letter.

Influent BOD_5 and TSS
The Department requires the reporting of raw sewage influent monitoring for BOD_5 and TSS in all POTW permits. This provides the Department with the ability to monitor the percent removal of each parameter as stipulated in section 2 of the Part A conditions and maintain records of the BOD_5 loading as required by 25 Pa. Code Chapter 94. The monitoring frequencies and sample types are identical to the effluent sampling.

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 11/13/19 by the Department. The inspection report indicates that the facility was operating normally, but Part A violations and failure to monitor pollutants required by the NPDES permit were noted.
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 one (1) open violations in the Safe Drinking Water program. The Safe Drinking Water program will be contacted, and this open violation will be resolved in the system prior to issuance of this permit.

INSP PROGRAM	PROGRAM SPECIFIC ID	INSP ID	VIOLATION ID	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR	INSP REGION
Safe Drinking Water	4140125	2946664	865451	10/17/2019	D2I	FAILURE TO CERTIFY COMPLETION OF AN UNITERRUPTED SYSTEM SERVICE PLAN	WELLS, GREGORY	NCRO

DMRs Summary - Upon review of the DMR's, the facility has been in compliance with the existing effluent limits except for the three (3) minor Ammonia exceedances listed below (See list of violations below).

Attachments

Potter Twp Appendices

Compliance History

DMR Data for Outfall 001 (from December 1, 2018 to November 30, 2019)

Parameter	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18
Flow (MGD) Average Monthly	0.01673	0.1420	0.00972	0.00883	0.00890	0.00852	0.00865	0.01089	0.01362	0.01536	0.01110	0.01140
Flow (MGD) Daily Maximum	0.02111	0.02249	0.01541	0.01179	0.01214	0.01424	0.01161	0.01943	0.01941	0.02334	0.01732	0.01628
pH (S.U.) Minimum	7.41	7.56	7.32	7.11	7.28	7.26	7.28	7.21	7.26	7.21	7.21	7.14
pH (S.U.) Maximum	7.83	7.69	7.68	7.56	7.6	7.41	7.39	7.36	7.38	7.38	7.32	7.35
DO (mg/L) Minimum	3.64	0.2	3.95	4.05	3.3	3.75	3.64	4.24	3.96	4.35	4.48	2.17
CBOD5 (lbs/day) Average Monthly	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.3	0.2	0.3
CBOD5 (lbs/day) Weekly Average	0.3	0.2	0.2	0.2	0.3	0.2	0.6	0.2	0.3	0.4	0.2	0.3
CBOD5 (mg/L) Average Monthly	3	3	3	3	3	3	5	3	3	4	3	3
CBOD5 (mg/L) Weekly Average	3	3	3	3	3	3	8	3	4	4	3	3
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	11	17	6	17	15	9	27	22	26	21	17	17
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	11	26	9	29	199	12	34	22	30	33	19	17
BOD5 (mg/L) Raw Sewage Influent Average Monthly	118	148	112	232	199	179	472	270	285	243	291	197
TSS (lbs/day) Average Monthly	0.2	0.3	0.2	0.3	0.4	0.8	0.7	0.9	0.2	0.3	0.1	0.1
TSS (lbs/day) Raw Sewage Influent Average Monthly	26	32	18	27	18	10	15	22	29	24	22	21

TSS (lbs/day) Raw Sewage Influent Daily Maximum	28	48	19	40	26	12	16	22	31	30	32	26
TSS (lbs/day) Weekly Average	0.2	0.4	0.2	0.1	0.6	0.9	1.0	0.9	0.4	0.3	0.1	0.2
TSS (mg/L) Average Monthly	2	5	3	4	8	15	9	11	3	4	2	1
TSS (mg/L) Raw Sewage Influent Average Monthly	273	262	338	383	267	201	249	270	324	304	347	244
TSS (mg/L) Weekly Average	2	6	5	2	14	17	12	12	4	4	3	2
Fecal Coliform (CFU/100 ml) Geometric Mean	4	181	37	10	81	31	121	21	451	4	4	8
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	4	354.4	43.6	16.4	98.4	48.8	145.6	25.2	898.8	4	4	12
UV Intensity (µw/cm²) Minimum	39.5	28.9	30.9	49	31.4	35.6	27.5	26.7	23.2	22.8	27.4	28.4
Total Nitrogen (lbs/day) Average Monthly												0.4
Total Nitrogen (mg/L) Average Monthly												8.32
Ammonia (lbs/day) Average Monthly	0.0100	0.3	0.2	0.2000	0.0200	0.0800	0.0200	0.04	0.0300	0.0200	0.0090	0.009
Ammonia (lbs/day) Weekly Average	0.0111	0.6	0.3	0.10000	0.0300	0.2000	0.0300	0.05	0.0400	0.0400	0.0100	0.01
Ammonia (mg/L) Average Monthly	0.1	4.9	4.4	3.2	0.4	1.6	0.3	0.5	0.3	0.3	0.1	0.1
Ammonia (mg/L) Weekly Average	0.1	10.0	7.0	1.951	0.100000	0.266	0.1	0.394	0.1	0.121	0.0001	< 0.1
Total Phosphorus (lbs/day) Average Monthly												0.4
Total Phosphorus (mg/L) Average Monthly												8.6

Compliance History

Effluent Violations for Outfall 001, from: January 1, 2019 To: November 30, 2019

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Ammonia	08/31/19	Avg Mo	3.2	mg/L	3	mg/L
Ammonia	09/30/19	Avg Mo	4.4	mg/L	3	mg/L
Ammonia	09/30/19	Wkly Avg	7.0	mg/L	4.5	mg/L

Summary of Inspections: None.

Other Comments: None.

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 **C**)
☐	TRC Evaluation Spreadsheet (see Appendix)
☐	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: