

Application Type Renewal  
 Facility Type Non-Municipal  
 Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0086932  
 APS ID 501870  
 Authorization ID 1274269

**Applicant and Facility Information**

Applicant Name	<u>Peifer Brothers</u>	Facility Name	<u>Yorkana MHP</u>
Applicant Address	<u>PO Box 247</u> <u>Silver Spring, PA 17575-0247</u>	Facility Address	<u>Lisa Circle</u> <u>York, PA 17406</u>
Applicant Contact	<u>Jay Peifer</u>	Facility Contact	<u></u>
Applicant Phone	<u>(717) 653-2521</u>	Facility Phone	<u></u>
Client ID	<u>64977</u>	Site ID	<u>485261</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Lower Windsor Township</u>
Connection Status	<u></u>	County	<u>York</u>
Date Application Received	<u>May 3, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>May 23, 2019</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of existing NPDES permit</u>		

**Summary of Review**

Keystone Kommunities/Peifer Brothers has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit for the Yorkhana MHP STP. The permit was last reissued to Keystone Kommunities/Peifer Brothers on October 17, 2014 and became effective on November 1, 2014. The permit expired on October 31, 2019 but the terms and conditions of the permit have been administratively extended since that time.

Based on the review outlined in this fact sheet, it is recommended that the permit be drafted, and a notice of the draft permit be published in the *Pennsylvania Bulletin* for public comments for 30 days. A file review of documents associated with the discharge or permittee may be available at the PA DEP southcentral regional office (SCRO), 909 Elmerton Avenue, Harrisburg, PA 17110. To make an appointment for file reviews, contact the SCRO file review coordinator at 717.705.4700.

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		Aaron Baar / Permits Section <b>Aaron Baar</b>	October 6, 2020
		Daniel W. Martin, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.02
Latitude	39° 58' 42.55"	Longitude	-76° 34' 14.35"
Quad Name	Red Lion	Quad Code	1933
Wastewater Description: Sewage Effluent			
Receiving Waters	Unnamed Tributary to Cabin Creek (WWF)	Stream Code	07850
NHD Com ID	57467155	RMI	2.68
Drainage Area	0.0772 mi <sup>2</sup>	Yield (cfs/mi <sup>2</sup> )	0.17766
Q <sub>7-10</sub> Flow (cfs)	0.013716	Q <sub>7-10</sub> Basis	USGS StreamStats
Elevation (ft)	574.04	Slope (ft/ft)	
Watershed No.	7-1	Chapter 93 Class.	WWF
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			
Nearest Downstream Public Water Supply Intake	Red Lion Municipal Authority Green Branch Intake		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	36.16	Distance from Outfall (mi)	10.29

**Point of First Surface Water Use (POFU):**

As previously determined, the discharge is to a swale which appears to become dry during the summer. During the permit renewal process in 1993, the stream survey was conducted by the DEP biologist, indicating that POFU is at approximately 250 meters (820 ft.) downstream from the point of discharge. Effluent limits and monitoring requirement were adjusted based upon this information. The POFU represents the location where continuous stream flow may be available for treated waste assimilation. The POFU can be generally determined based upon both biological and physical factors of the stream. An aquatic investigation on June 11, 2014 noted that the POFU is approximately 50 meters (164 ft.) downstream from the point of discharge and that the stream begins at the POFU. The USGS PA StreamStats is showing Q<sub>7-10</sub> of 0.0056 cfs and the drainage area of 0.07 sq. mi at POFU.

**Drainage Area**

The discharge is to UT to Cabin Creek at RMI 2.68. A drainage area upstream of the discharge point is determined to be 0.0772 sq.mi. according to USGS PA StreamStats available at <https://streamstats.usgs.gov/ss/>.

**Stream Flow**

The watershed for the UT to Cabin Creek is too small for accurate projections, so a LFY for the UT to Cabin Creek watershed was used to calculate a LFY for the area tributary to Outfall 001, from which a Q<sub>7-10</sub> flow upstream of Outfall 001 was calculated. According to StreamStats, the watershed has a Q<sub>7-10</sub> of 0.517 cfs and a drainage area of 2.91 mi<sup>2</sup>, which results in a watershed LFY of 0.17766 cfs/mi<sup>2</sup>. Multiplying this basin-wide LFY by the drainage area upstream of Outfall 001, 0.0772 mi<sup>2</sup>, yielded an estimated Q<sub>7-10</sub> flow of 0.013716 cfs.

**UT to Cabin Creek**

UT to Cabin Creek is classified as a WWF waterway. Effluent limits for this discharge have been developed to ensure that existing in-stream water uses and the level of water quality necessary to protect the existing uses are maintained and protected.

*Public Water Supply Intake*

The nearest downstream public water supply intake is the Red Lion Municipal Authority Green Branch intake located on the Susquehanna River. Considering the distance and nature of the discharge, the discharge is not expected to significantly affect the water supply.

*Class A Wild Trout Streams*

The receiving stream is not a Class A Wild Trout stream.

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Yorkana MHP				
<b>WQM Permit No.</b>		<b>Issuance Date</b>		
6796404 T-1		11/17/2006 (Transfer)		
6796404		05/29/1996		
<b>Waste Type</b>	<b>Degree of Treatment</b>	<b>Process Type</b>	<b>Disinfection</b>	<b>Avg Annual Flow (MGD)</b>
Sewage	Secondary	Extended Aeration	Hypochlorite	0.01075*
<b>Hydraulic Capacity (MGD)</b>	<b>Organic Capacity (lbs/day)</b>	<b>Load Status</b>	<b>Biosolids Treatment</b>	<b>Biosolids Use/Disposal</b>
0.01075*		Not Overloaded		

\*This wastewater treatment facility has an annual average flow and hydraulic design capacity of 0.01075 MGD, according to the Water Quality Management (WQM) permit no. 6796404 T-1 and its associated applications/design engineer's report. This is based on wastewater from a 43-unit mobile home park (250 GPD per unit). However, the facility, according to the design engineer's report, was constructed large enough to accommodate expansion of the park in the future which was estimated to be 19,700 GPD. As a result of this, all effluent limitations and monitoring requirements previously have been established based on 0.02 MGD.

Keystone Kommunities/Peifer Brothers owns and operates the Yorkhana MHP sanitary wastewater treatment facility located in Lower Windsor Township, York County. The facility serves only the Yorkhana MHP, all wastes are residential in nature, and all sewer systems are 100% separated. Having an annual average design flow of 0.020 MGD and a hydraulic design capacity of 0.020 MGD, this facility consists of an EQ Tank, aeration tank x3, secondary clarification x2, a chlorine contact tank, a dechlorination system, post seration and the outfall (Outfall 001). Soda Ash (pH control), calcium hypochlorite (disinfection) and sodium sulfite (dechlorination) are added to the treatment process. Solids are stored in an onsite sludge holding tank for offsite disposal.

Compliance History	
<b>Summary of DMRs:</b>	A summary of past DMR data is presented on the next page.
<b>Summary of Inspections:</b>	<p>Since the last NPDES permit renewal, there are records that the facility has been inspected at least two times. The notes from the inspections are as follows:</p> <p>12/19/2017: Sheena Ripple, DEP Water Quality Specialist, conducted a routine inspection. No violations were noted.</p> <p>07/23/2019: Austen Randecker, DEP Water Quality Specialist, conducted a routine inspection. No violations were noted.</p>

Other Comments: A records review revealed that there are no Clean Water open violations associated with this permittee as of October 6, 2020.

Existing Permit Limits

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.04	XXX	0.12	1/day	Grab
CBOD5	XXX	XXX	XXX	15	XXX	30	2/month	Grab
Total Suspended Solids	XXX	XXX	XXX	30	XXX	60	2/month	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3.0	2/month	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9.0	2/month	Grab
Total Nitrogen	XXX	Report Avg. Annual	XXX	Report Avg. Annual	XXX	XXX	1/year	Calculate
Total Phosphorus	XXX	Report Avg. Annual	XXX	Report Avg. Annual	XXX	XXX	1/year	8-Hr Composite

Compliance Sampling Location: Outfall 001

Compliance History

DMR Data for Outfall 001 (from September 1, 2019 to August 31, 2020)

Parameter	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19
Flow (MGD) Average Monthly	0.003359	0.003326	0.003128	0.003229	0.002779	0.00279	0.003631	0.002823	0.002858	0.002566	0.002829	0.002883
Flow (MGD) Daily Maximum	0.00925	0.005399	0.005584	0.006237	0.004463	0.004274	0.008838	0.005694	0.004619	0.004157	0.004525	0.004121
pH (S.U.) Minimum	7.8	7.5	7.7	7.7	7.8	7.7	7.8	7.8	7.9	8.0	7.9	7.9
pH (S.U.) Maximum	8.2	8.2	8.3	8.0	8.1	8.1	8.2	8.1	8.2	8.2	8.1	8.1
DO (mg/L) Minimum	8.0	7.6	8.4	8.9	10.3	10.5	11.2	10.2	9.6	9.7	8.7	8.3
TRC (mg/L) Average Monthly	< 0.02	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TRC (mg/L) Instantaneous Maximum	0.03	0.04	0.04	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03
CBOD5 (mg/L) Average Monthly	2.2	< 2	< 2.0	4.2	3.4	4.6	3.8	5.2	5.0	< 2.0	< 2.0	< 2.0
CBOD5 (mg/L) Instantaneous Maximum	2.2	< 2	< 2	5.2	3.4	5.8	4.4	6.4	6.4	< 2.0	< 2.0	< 2
TSS (mg/L) Average Monthly	< 5	< 5	< 5.5	5.0	< 5	8.5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
TSS (mg/L) Instantaneous Maximum	< 5	< 5	6	5	< 5	10	< 5.0	< 5	< 5.0	< 5.0	< 5.0	< 5
Fecal Coliform (CFU/100 ml) Geometric Mean	< 1	279	< 1	< 1	4	< 5	< 1	< 1	5	48	13	9
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	2	864	2	< 1	18	27	< 1	< 1	9	57	26	25
Total Nitrogen (lbs/day) Annual Average									< 1			
Total Nitrogen (mg/L) Annual Average									< 56.1			
Ammonia (mg/L) Average Monthly	< 0.3	0.1	< 0.1	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2	< 0.1
Ammonia (mg/L) Instantaneous Maximum	0.412	0.11	0.126	0.209	< 0.1	< 0.1	0.171	0.153	< 0.1	0.102	0.227	< 0.1
Total Phosphorus (lbs/day) Annual Average									0.1			
Total Phosphorus (mg/L) Annual Average									6.2			

**Compliance History**

**Effluent Violations for Outfall 001, from: October 1, 2019 To: August 31, 2020**

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	07/31/20	Geo Mean	279	CFU/100 ml	200	CFU/100 ml

Other Comments: The violation noted above appears to be anomalous and not indicative of a system problem at the treatment plant.

**Development of Effluent Limitations**

Outfall No. 001 Design Flow (MGD) .02  
 Latitude 39° 58' 48.78" Longitude -76° 34' 19.79"  
 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 <sub>5</sub>	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)

Comments: These standards apply, subject to water quality analysis and BPJ where applicable.

**Water Quality-Based Limitations**

*CBOD<sub>5</sub>, NH<sub>3</sub>-N and Dissolved Oxygen (DO)*

WQM 7.0 version 1.0b is a water quality model designed to assist DEP to determine appropriate permit requirements for CBOD<sub>5</sub>, NH<sub>3</sub>-N and DO. DEP's guidance 391-2000-007 provides the technical methods contained in WQM 7.0 for conducting wasteload allocation and for determining recommended NPDES effluent limits for point source discharges.

The model was utilized, and the model output indicated that existing limits for both CBOD<sub>5</sub> and ammonia are lower than those specified in the model. Due to anti-backsliding provisions, however, the existing limits are deemed to be still appropriate. The model did recommend a new D.O. limit of 6.0 mg/L (IMIN), an increase over the existing limit of 5 mg/L. DMR data from the facility indicates that the higher limit is already being achieved by the existing unit processes, so the higher DO limit is proposed to take effect immediately in this renewed permit.

The monitoring frequency and sample type for CBOD<sub>5</sub>, DO and ammonia are proposed to remain unchanged.

*Total Residual Chlorine*

Since chlorine is used for disinfection, Total Residual Chlorine (TRC) effluent levels must be regulated in accordance with 25 Pa Code §92a.48(b). DEP's TRC\_CALC worksheet was utilized to determine if the existing BAT TBEL is still appropriate. The worksheet indicated that existing limits for TRC are lower than those specified in the worksheet. Due to anti-backsliding provisions, however, the existing limits are deemed to be still appropriate.

*Toxics*

There are no industrial contributions to this facility. DEP's NPDES permit application for minor sewages (less than 1.0 MGD) does not require sampling for heavy metals including Total Copper, Total Lead, and Total Zinc.



### **Best Professional Judgment (BPJ) Limitations**

#### *Total Phosphorus & Total Nitrogen*

DEP's SOP no. BPNPSM-PMT-033 recommends monitoring requirements for Total Phosphorus and Total Nitrogen for all sewage facilities. The monitoring of NOx and TKN have been added to this permit to facilitate the connection of TN data. Since the ammonia is being evaluated on a grab basis, an ammonia composite sample has been added once every 6-months so an accurate TN measurement can occur. Also, the reporting frequency of TN and TP is proposed to be increased in this permit to once every six months (from 1/year) in conformity with other Chesapeake Bay Phase 5 permits issued in the region.

### **Additional Considerations**

#### *Flow Monitoring*

The requirement to monitor the volume of effluent will remain in the draft permit per 40 CFR § 122.44(i)(1)(ii).

#### *Chesapeake Bay TMDL*

The Department formulated a strategy in April 2007, to comply with the EPA's and Chesapeake Bay Foundation's requirements to reduce point source loadings of Total Nitrogen (TN) and Total Phosphorus (TP) to the Bay. In the Strategy, sewage dischargers have been prioritized by Central Office based on their delivered TN loadings to the Bay. The highest priority (Phases 1, 2, and 3) dischargers received annual loading caps based on their design flow on August 29, 2005 and concentrations of 6 mg/l TN and 0.8 mg/l TP. Phase 4 (0.2 -0.4mgd) and Phase 5 (below 0.2mgd) facilities were required to monitor and report TN and TP during permit renewal at a monitoring frequency following Table 6-3 of DEP's Technical Guidance for Development and Specification of effluent Limitations (No. 362-0400-001).

EPA published the Chesapeake Bay Total Maximum Daily Load (TMDL) in December of 2010. Despite extensive restoration efforts during the past 25 years, the TMDL was prompted by insufficient progress and continued poor water quality in the Chesapeake Bay and its tidal tributaries.

In order to address the TMDL, Pennsylvania developed, in addition to the Bay Strategy, a Chesapeake Watershed Implementation Plan (WIP) Phase 1 in January 2011 and Phase 2 in March 2012. In accordance with the Phase 3 WIP and its supplement, re-issuing permits for significant dischargers follow the same phased approach formulated in the original Bay strategy, whilst Phase 4 and Phase 5 will be required to monitor and report TN and TP during permit renewal.

The Phase 3 WIP categorizes this facility as a phase 5 non-significant sewage facility that has a design flow less than 0.2 MGD but greater than 0.002 MGD. The WIP recommends monitoring and reporting for Total Nitrogen and Total Phosphorus throughout the permit term at a frequency no less than annual. The monitoring of NOx, TKN and TN once every six months will be written in the permit in conformity with other permits issued in the region.

#### *Monitoring Frequency and Sample Type*

The facility currently is required to collect 2/month grab effluent samples for CBOD5, TSS, fecal, and ammonia. This monitoring frequency is consistent with Table 6-3 of DEP's technical guidance no. 362-0400-001 and will remain unchanged in this permit.

#### *Antidegradation Requirements*

All effluent limitations and monitoring requirements have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected.

#### *Anti-backsliding Requirement*

All effluent limits proposed in this fact sheet are as stringent as effluent limits specified in the existing permit renewal. This approach is in accordance with 40 CFR §122.44(l)(1).

**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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.04	XXX	0.12	1/day	Grab
CBOD5	XXX	XXX	XXX	15	XXX	30	2/month	Grab
TSS	XXX	XXX	XXX	30	XXX	60	2/month	Grab
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
Nitrate-Nitrite	XXX	XXX	XXX	Report SEMI AVG	XXX	XXX	1/6 months	8-Hr Composite
Nitrate-Nitrite (lbs)	XXX	Report SEMI AVG	XXX	XXX	XXX	XXX	1/6 months	Calculation
Total Nitrogen (lbs)	XXX	Report SEMI AVG	XXX	XXX	XXX	XXX	1/6 months	Calculation
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9.0	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3.0	2/month	Grab

Outfall 001 , Continued (from Permit Effective Date through Permit Expiration Date )

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
TKN	XXX	XXX	XXX	Report SEMI AVG	XXX	XXX	1/6 months	8-Hr Composite
TKN (lbs)	XXX	Report SEMI AVG	XXX	XXX	XXX	XXX	1/6 months	Calculation
Ammonia	XXX	XXX	XXX	Report SEMI AVG	XXX	XXX	1/6 months	8-Hr Composite
Ammonia (lbs)	XXX	Report SEMI AVG	XXX	XXX	XXX	XXX	1/6 months	Calculation
Total Phosphorus	XXX	XXX	XXX	Report SEMI AVG	XXX	XXX	1/6 months	8-Hr Composite
Total Phosphorus (lbs)	XXX	Report SEMI AVG	XXX	XXX	XXX	XXX	1/6 months	Calculation

Compliance Sampling Location: Outfall 001



PA0086932 Report  
4.pdf



PA0086932 Report  
5.pdf



PA0086932 Report  
6.pdf



PA0086932  
TRC\_CALC.xls



PA0086932  
StreamStats 001.pdf



PA0086932  
StreamStats Downst



PA0086932  
StreamStats Basin.p



PA0086932 Report  
1.pdf



PA0086932 Report  
2.pdf



PA0086932 Report  
3.pdf



Tools and References Used to Develop Permit	
<input checked="" type="checkbox"/>	WQM for Windows Model (see Attachment [redacted])
<input type="checkbox"/>	PENTOXSD for Windows Model (see Attachment [redacted])
<input checked="" type="checkbox"/>	TRC Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Toxics Screening Analysis Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input checked="" type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
<input checked="" type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 385-2000-011, 9/08.
<input checked="" type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
<input checked="" type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
<input checked="" type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Design Stream Flows, 391-2000-023, 9/98.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
<input type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input type="checkbox"/>	SOP: [redacted]
<input type="checkbox"/>	Other: [redacted]