

## Northwest Regional Office CLEAN WATER PROGRAM

Application Type
Facility Type
Major / Minor

Minor

# NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0238571
APS ID 1000399

1285568

Soli

Authorization ID

	Applicant and Facilit	y Information	
Applicant Name	Rhett Walls d/b/a Pinehurst Manor MHP	Facility Name	Pinehurst Manor MHP
Applicant Address	907 Rockdale Road	Facility Address	112 Jan Drive
	Butler, PA 16002		Butler, PA 16001
Applicant Contact	Rhett Walls	Facility Contact	David Bocci, Operator
Applicant Phone	(724) 584-3390	Facility Phone	(724) 712-3219
Client ID	29145	Site ID	451618
Ch 94 Load Status	Not Overloaded	Municipality	Center Township
Connection Status	No Limitations	County	Butler County
Date Application Rec	eived August 9, 2019	EPA Waived?	Yes
Date Application Acc	epted August 28, 2019	If No, Reason	
Purpose of Application	Renewal of an NPDES Permit for an exist	ing discharge of treat	ed sanitary wastewater.

#### **Summary of Review**

Act 14 - Proof of Notification was submitted and received.

A Part II Water Quality Management permit is not required at this time.

The Permittee should be able to continue to meet the limits of this permit, which will continue to protect the uses of the receiving stream.

- I. OTHER REQUIREMENTS:
  - A. Stormwater into sewers
- D. Public sewerage availability

B. Right of way

E. Little or no assimilative capacity or dilution

- C. Solids handling
- F. Daily operation of the ultraviolet (UV) disinfection system

#### SPECIAL CONDITIONS:

Solids Management

There are 2 open violations in efacts for Client ID 29145 as of 5/21/2021 (see Attachment 2).

Approve	Deny	Signatures	Date
V		Stephen A. McCauley	5/21/2021
^		Stephen A. McCauley, E.I.T. / Environmental Engineering Specialist	5/21/2021
V		Justin C. Dickey	5/24/2021
^		Justin C. Dickey, P.E. / Environmental Engineer Manager	5/24/2021

Discharge, Receiving Waters and Water Supply Infor	mation	
Outfall No. 001	Design Flow (MGD)	0.014
Latitude 40° 56' 48.10"	Longitude	-79º 56' 58.29"
Quad Name	Quad Code	
Wastewater Description: Sewage Effluent		
Unnamed Tributary to Receiving Waters the Stony Run (WWF)	Stream Code	N/A
NHD Com ID 126221009	RMI	N/A
Drainage Area 0.06	Yield (cfs/mi²)	0.047 (Buffalo Cr. 1976-1996)
Q <sub>7-10</sub> Flow (cfs) 0.0028	Q <sub>7-10</sub> Basis	calculated
Floration (ft) 1260	Slope (ft/ft)	0.02228
Watershed No. 20-C	Chapter 93 Class.	WWF
Existing Use		-
Exceptions to Use -	Exceptions to Criteria	-
Assessment Status Impaired*		
Cause(s) of Impairment Metals		
Source(s) of Impairment Acid Mine Drainage		
TMDL Status Pending	Name -	
Background/Ambient Data	Data Source	
pH (SU)	-	
Temperature (°F)		
Hardness (mg/L)		
Other:		
Nearest Downstream Public Water Supply Intake	Beaver Falls Municipal Author	ity
PWS Waters Beaver River	Flow at Intake (cfs)	561
PWS RMI 3.5	Distance from Outfall (mi)	49.0

Sludge use and disposal description and location(s): Sludge is not used, it is disposed of at a certified landfill.

#### **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.

<sup>\* -</sup> This facility is not expected to discharge Aluminum, Iron, and Manganese in any significant quantities. However, per the previous renewal which was based on the SOP, monitoring for Aluminum, Iron, and Manganese will be retained.

## NPDES Permit Fact Sheet Pinehurst Manor MHP

Narrative: This Fact Sheet details the determination of draft NPDES permit limits for an existing discharge of 0.014 MGD

of treated sewage from an existing non-municipal STP serving a MHP in Center Township, Butler County.

Permitted treatment consists of: (WQM Permit no. 1001415)

A 9,760 gallon aerated equalization tank with dual grinder pumps, two 11,387 gallon Sequential Batch Reactor (SBR) tanks in parallel, a 4,880 aerated sludge

thickening/holding tank, a 4,880 gallon aerated effluent pump tank, and Ultraviolet (UV)

light disinfection.

#### 1. Streamflow:

The yieldrate for the receiving stream at Outfall 001 was calculated from the nearest gage station details:

Buffalo Creek at Freeport, PA (1976-1996): Q<sub>7-10</sub>: <u>6.37</u> cfs (from StreamStats)

(USGS Gage 03049000) Drainage Area: 137 sq. mi. (from StreamStats)

Yieldrate: 0.047 cfsm calculated

<u>Unnamed Tributary to the</u> Yieldrate: <u>0.047</u> cfsm (calculated above) <u>Stoney Run at Outfall 001:</u> Drainage Area: <u>0.06</u> sq. mi. (from StreamStats)

Q<sub>7-10</sub>: 0.0028 cfs calculated

2. Wasteflow: Outfall 001

Maximum discharge: 0.014 MGD = 0.021 cfs

Runoff flow period: 24 hours Basis: Runoff flow with flow equalization

There is less than 3 parts stream flow (Q7-10) to 1 part effluent (design flow) at the discharge point. However, since this is an existing discharge, the more stringent treatment requirements cannot be achieved, and the receiving stream is not impaired by the discharge, the treatment requirements in document number 391-2000-014, titled, "Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers", dated April 12, 2008, will not be implemented in this NPDES Permit.

#### 3. Parameters:

The following parameters were evaluated: pH, Total Suspended Solids, Fecal Coliform, Phosphorus, NH<sub>3</sub>-N, CBOD<sub>5</sub>, Dissolved Oxygen, and Total Residual Chlorine. NH<sub>3</sub>-N, CBOD<sub>5</sub>, and Dissolved Oxygen were evaluated using WQM 7.0 at the discharge point.

NO<sub>2</sub>-NO<sub>3</sub>, Fluoride, Phenolics, Sulfates, and Chlorides can be evaluated using PentoxSD at the nearest downstream potable water supply (PWS). Since there is significant dilution available, no modeling was performed for this facility.

a. <u>pH</u>

Between 6.0 and 9.0 at all times

Basis: Application of Chapter 93.7 technology-based limits. The measurement frequency was

increased from 1/week to 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations"

(362-0400-001).

b. <u>Total Suspended Solids</u>

Limits are 30 mg/l as a monthly average and 60 as a daily maximum.

Basis: Application of Chapter 92a47 technology-based limits

# NPDES Permit Fact Sheet Pinehurst Manor MHP

C.	Fecal Coliform	
	05/01 - 09/30:	200/100ml (monthly average geometric mean) 1,000/100ml (instantaneous maximum)
	10/01 - 04/30:	2,000/100ml (monthly average geometric mean) 10,000/100ml (instantaneous maximum)
	Basis:	Application of Chapter 92a47 technology-based limits.
d.	E. Coli	
	Monitoring was add	ded for E. Coli at a frequency of 1/year.
	Basis:	Application of Chapter 92a.61 as recommended by the SOP.
e.	<u>Phosphorus</u>	
	Limit not	necessary
	Basis	s: <u>N/A</u>
		cessary due to:
		scharge to a lake, pond, or impoundment
		scharge to a stream scharge to a dry stream
	Basis:	The previous Phosphorus limit of 2.0 mg/l will be retained based on Chapter 96.5 due to
		the discharge flowing downstream to the Connoquenessing Creek, which is impaired for nutrients.
f.	Total Nitrogen	
	∠ Limit not	necessary
	Basi	The previous monitoring for Total Nitrogen will be retained in accordance with the SOP, based on Chapter 92a.61.
	Limit ne	cessary due to:
		scharge to a lake, pond, or impoundment
		scharge to a stream scharge to a dry stream
		<u>N/A</u>
g.	NO <sub>2</sub> -NO <sub>3</sub> , Fluoride	Phenolics, Sulfates, and Chlorides
	Nearest Downst	ream potable water supply (PWS): <u>Beaver Falls Municipal Authority</u>
	Distance downs	stream from the point of discharge: 49.0 miles (approximate)
		mits necessary s needed
	Ва	asis: Significant dilution available.
h.	Ammonia-Nitrogen	(NH <sub>3</sub> -N)
	Median discharge	pH to be used: 6.5 Standard Units (S.U.)
		Basis: Average pH value from DMR summary

## NPDES Permit Fact Sheet Pinehurst Manor MHP

i.

j.

Discharge temperature: 25°C (default value used in the absence of data) Median stream pH to be used: 7.0 Standard Units (S.U.) Basis: Default value used in the absence of data Stream Temperature: 25°C (default value used for WWF modeling) Background NH<sub>3</sub>-N concentration: 0.1 mg/l Basis: Default value used in the absence of data calculated summer NH3-N limits: 2.0 mg/l (monthly average) mg/l (instantaneous maximum) 4.0 calculated winter NH<sub>3</sub>-N limits: 6.0 mg/l (monthly average) 12.0 mg/l (instantaneous maximum) WQ modeling resulted in the calculated summer limits above (see Attachment 1), which are Result: more restrictive than in the previous NPDES Permit. The winter limits are calculated as three times the summer limits. However, since the previous NH3-N limits of 1.5 mg/l monthly average (summer) and 4.5 mg/l monthly average (winter) are attainable, they will be retained with this renewal. CBOD<sub>5</sub> Median discharge pH to be used: 6.5 Standard Units (S.U.) Basis: Average pH value from DMR summary Discharge temperature: 25°C (default value used in the absence of data) Median stream pH to be used: 7.0 Standard Units (S.U.) Basis: <u>Default value used in the absence of data</u> Stream Temperature: 25°C (default value used for WWF modeling) Background CBOD<sub>5</sub> concentration: 2.0 mg/l Basis: Default value used in the absence of data calculated summer CBOD<sub>5</sub> limits: 25.0 mg/l (monthly average) 50.0 mg/l (instantaneous maximum) calculated winter CBOD<sub>5</sub> limits: 25.0 mg/l (monthly average) mg/l (instantaneous maximum) 50.0 Result: WQ modeling resulted in the calculated summer limits above (see Attachment 1), which are the same as the previous NPDES Permit. The winter limits are calculated as three times the summer limits, but since the technology-based limits are more protective, they will be used. Since the summer limits and the winter limits are the same, the limits for CBOD<sub>5</sub> will be set year-round as in the previous NPDES Permit. Dissolved Oxygen (DO) - minimum desired in effluent to protect all aquatic life. 4.0 mg/l  $\bowtie$ 5.0 - desired in effluent for CWF, WWF, or TSF. mg/l 6.0 - minimum required due to discharge going to a drainage swale or ditch. mg/l 8.0 - required due to discharge going to a naturally reproducing salmonid stream mg/l Discussion: The technology-based minimum of 5.0 mg/l is recommended by the WQ Model (see Attachment 1) and the SOP based on Chapter 93.7, under the authority of Chapter

92a.61. The Dissolved Oxygen minimum of 5.0 mg/l will be retained with this renewal.

The measurement frequency was increased from 1/week to 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations" (362-0400-001).

k.	Total Res	idual C	nlorine (TRC)	
	⊠ N	o limit i	ecessary	
		•	ras increased from 1/week to 1/day as recomme Technical Guidance for the Development and S 362-0400-001).	•

#### I. Anti-Backsliding

Since all the permit limits in this renewal are the same or more restrictive than the previous NPDES Permit, anti-backsliding is not applicable.

#### 4. Attachment List:

Attachment 1 - WQ Modeling Printouts

Attachment 2 - Open violations in efacts

(The Attachments above can be found at the end of this document)

### **Compliance History**

### DMR Data for Outfall 001 (from April 1, 2020 to March 31, 2021)

Flow (MGD)	Parameter	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20
Flow (MGD)	Flow (MGD)												
Daily Maximum   0.003   0.00		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
PH (S.U.)   Resimble   Resimble													
Minimum   6.5   6.5   6.0   6.0   6.0   6.0   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.0   6.0     PH (S.U.)   7.0   7.0   7.5   7.5   7.0   7.0   7.0   7.5   7.5   7.5   7.0   7.0     DO (mg/L)   Minimum   6.0   5.7   5.5   6.3   5.5   6.5   5.5   5.9   6.3   6.3   5.8   6.3     GBOD5 (mg/L)   Average Monthly   3.0   3.0   3.7   3.3   3.0   3.0   3.0   3.0   3.0   3.0   3.0   3.0   3.0     Average Monthly   3.0   7.5   8.5   5.0   5.5   13.0   7.5   7.5   7.5   7.5   3.0   3.0   3.5     Fecal Coliform (CFU/100 ml)   Geometric Mean   3   19   257   1253   43   4   1   1   1   1   5   1   1     Instantaneous Maximum   4   34   326   2420   613   8   1   1   1   1   1   2   2     Average Monthly   4200	Daily Maximum	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
PH (S.U.)   Maximum   7.0   7.0   7.5   7.5   7.0   7.0   7.0   7.5   7.5   7.0													
Maximum		6.5	6.5	6.0	6.0	6.0	6.5	6.5	6.5	6.5	6.5	6.0	6.0
DO (mg/L)   Go.   S.7   S.5   G.3   S.5   G.5   S.5   S.9   G.3   G.3   S.8   G.3   G.5   G.5													
Minimum   Mini		7.0	7.0	7.5	7.5	7.0	7.0	7.0	7.5	7.5	7.5	7.0	7.0
CBOD5 (mg/L)   Average Monthly   3.0   3.0   3.7   3.3   3.0   3													
Average Monthly 3.0 3.0 3.7 3.3 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0		6.0	5.7	5.5	6.3	5.5	6.5	5.5	5.9	6.3	6.3	5.8	6.3
TSS (mg/L) Average Monthly 3.0 7.5 8.5 5.0 5.5 13.0 7.5 7.5 7.5 3.0 3.0 3.0 3.5 Fecal Coliform (CFU/100 ml) Geometric Mean 3 19 257 1253 43 4 1 1 1 5 1 1 Fecal Coliform (CFU/100 ml) Instantaneous Maximum 4 34 326 2420 613 8 1 1 1 1 1 1 1 2 2 UV Intensity (µw/cm²) Average Monthly 4200 4200 4200 4200 4200 4200 4200 420													
Average Monthly       3.0       7.5       8.5       5.0       5.5       13.0       7.5       7.5       7.5       3.0       3.0       3.5         Fecal Coliform (CFU/100 ml)       3       19       257       1253       43       4       1       1       1       5       1       1         Fecal Coliform (CFU/100 ml)       4       34       326       2420       613       8       1       1       1       1       1       2       2         UV Intensity (μw/cm²)       4200		3.0	3.0	3.7	3.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Fecal Coliform (CFU/100 ml)   Geometric Mean   3   19   257   1253   43   4   1   1   1   5   1   1   1   5   1   1							40.0						
CFU/100 ml)   Geometric Mean   3   19   257   1253   43   4   1   1   1   5   1   1   1   5   1   1		3.0	7.5	8.5	5.0	5.5	13.0	7.5	7.5	7.5	3.0	3.0	3.5
Seometric Mean   3   19   257   1253   43   4   1   1   1   5   1   1													
Fecal Coliform (CFU/100 ml) Instantaneous Maximum			40	057	4050	40					_		4
(CFU/100 ml) Instantaneous Maximum 4 34 326 2420 613 8 1 1 1 1 1 1 2 2  UV Intensity (μw/cm²) Average Monthly 4200 4200 4200 4200 4200 4200 4200 420		3	19	257	1253	43	4	1	1	1	5	1	1
Instantaneous Maximum													
UV Intensity (μw/cm²)   Average Monthly   4200		4	0.4	000	0.400	040	0		4	4	4.4		0
Average Monthly         4200		4	34	326	2420	613	8	1	1	1	11	2	2
Total Nitrogen (mg/L)         Average Monthly         35.4         47.4         45.6         27.9         40.9         45.3         13.5         6.6         2.9         7.4         15.0         20.9           Ammonia (mg/L)         Average Monthly         0.2         0.4         0.3         0.3         0.2         0.5         0.2         0.5         0.7         0.9         0.6         0.5           Total Phosphorus (mg/L)         Average Monthly         1.9         1.0         2.1         2.4         2.0         0.3         0.3         0.3         0.3         0.3         1.7           Total Aluminum (mg/L)         Average Monthly         0.70         0.07	, · · · · · · · · · · · · · · · · · · ·	4200	4200	4000	4000	4000	4200	4200	4200	4200	4200	4000	4200
Average Monthly         35.4         47.4         45.6         27.9         40.9         45.3         13.5         6.6         2.9         7.4         15.0         20.9           Ammonia (mg/L)         Average Monthly         0.2         0.4         0.3         0.3         0.2         0.5         0.2         0.5         0.7         0.9         0.6         0.5           Total Phosphorus (mg/L)         1.9         1.0         2.1         2.4         2.0         0.3         0.3         0.3         0.3         0.3         1.7           Total Aluminum (mg/L)         Average Monthly         0.70         0.70         0.70         0.70         0.70         0.70         0.70         0.70         0.3		4200	4200	4200	4200	4200	4200	4200	4200	4200	4200	4200	4200
Ammonia (mg/L)         Average Monthly         0.2         0.4         0.3         0.3         0.2         0.5         0.2         0.5         0.7         0.9         0.6         0.5           Total Phosphorus (mg/L)         Average Monthly         1.9         1.0         2.1         2.4         2.0         0.3         0.3         0.3         0.3         0.3         0.3         1.7           Total Aluminum (mg/L)         Average Monthly         0.70         0.70         0.70         0.07         0.07         0.07         0.07         0.07         0.07         0.07         0.07         0.07         0.07         0.07         0.07         0.09         0.6         0.5         0.5         0.07         0.03         0.3		25.4	17.1	45.6	27.0	40.0	45.2	12.5	6.6	2.0	7.4	15.0	20.0
Average Monthly         0.2         0.4         0.3         0.3         0.2         0.5         0.2         0.5         0.7         0.9         0.6         0.5           Total Phosphorus (mg/L) Average Monthly         1.9         1.0         2.1         2.4         2.0         0.3         0.3         0.3         0.3         0.3         0.3         1.7           Total Aluminum (mg/L) Average Monthly         0.70         0.70         0.70         0.07		35.4	47.4	45.0	21.9	40.9	45.5	13.5	0.0	2.9	7.4	15.0	20.9
Total Phosphorus (mg/L)		0.2	0.4	0.3	0.3	0.2	0.5	0.2	0.5	0.7	0.0	0.6	0.5
Average Monthly         1.9         1.0         2.1         2.4         2.0         0.3         0.3         0.3         0.3         0.3         1.7           Total Aluminum (mg/L) Average Monthly         0.70		0.2	0.4	0.5	0.5	0.2	0.5	0.2	0.5	0.7	0.9	0.0	0.5
Total Aluminum (mg/L) Average Monthly  O.70  Total Iron (mg/L) Average Monthly  0.07		1 0	1.0	2.1	2.4	2.0	0.3	0.3	0.3	0.3	0.3	0.3	17
Average Monthly 0.70  Total Iron (mg/L)  Average Monthly 0.07		1.9	1.0	2.1	2.4	2.0	0.5	0.5	0.5	0.5	0.5	0.5	1.7
Total Iron (mg/L) Average Monthly  0.07					0.70								
Average Monthly 0.07					0.70								
					0.07								
Total Manganese (mg/L)	Total Manganese (mg/L)				0.07								
Average Monthly 0.02					0.02								

#### **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.

			Effluent L	imitations			Monitoring Red	quirements
Parameter	Mass Units	(lbs/day) (1)		Concentrat	ions (mg/L)		Minimum <sup>(2)</sup>	Required
Parameter	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum	Measurement Frequency	Sample Type
Flow (MCD)	Donort	Report	XXX	VVV	XXX	XXX	1/week	Measured
Flow (MGD)	Report	Daily Max	6.0	XXX	^^^	^^^	1/week	Measured
pH (S.U.)	XXX	XXX	Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
								8-Hr
CBOD5	XXX	XXX	XXX	25.0	XXX	50	2/month	Composite
								8-Hr
TSS	XXX	XXX	XXX	30.0	XXX	60	2/month	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)				200				
May 1 - Sep 30	XXX	XXX	XXX	Geo Mean	XXX	1000	2/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
UV Intensity (µw/cm²)	XXX	XXX	XXX	Report	XXX	XXX	1/day	Measured
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Ammonia-Nitrogen		^^^		Кероп			2/111011111	8-Hr
Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9	2/month	Composite
Ammonia-Nitrogen	7000	7007	7000	1.0	7000	Ü	2,111011111	8-Hr
May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3	2/month	Composite
								8-Hr
Total Phosphorus	XXX	XXX	XXX	2.0	XXX	4	2/month	Composite
		2007	2004	Report	2004	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		8-Hr
Total Aluminum	XXX	XXX	XXX	Annl Avg	XXX	XXX	1/year	Composite

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

			Effluent L	imitations			Monitoring Red	quirements
Parameter	Mass Units	(lbs/day) <sup>(1)</sup>		Concentrat	ions (mg/L)		Minimum <sup>(2)</sup>	Required
Faranietei	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum	Measurement Frequency	Sample Type
				Report				8-Hr
Total Iron	XXX	XXX	XXX	Anni Avg	XXX	XXX	1/year	Composite
				Report				8-Hr
Total Manganese	XXX	XXX	XXX	Anni Avg	XXX	XXX	1/year	Composite

Compliance Sampling Location: at Outfall 001, after Ultraviolet (UV) light disinfection.

Flow, UV intensity, and Total Nitrogen are monitor only based on Chapter 92a.61. The limits for pH are technology-based on Chapter 93.7. The limits for CBOD<sub>5</sub>, Total Suspended Solids, Dissolved Oxygen, and Fecal Coliform are technology based on Chapter 92a.47. The limits for Ammonia-Nitrogen are water quality-based on Chapter 93.7. The Total Phosphorus limit is technology-based on Chapter 96.5. Monitoring for E. Coli, Total Aluminum, Total Iron, and Total Manganese is based on Chapter 92a.61.

#### Attachment 1

## **WQM 7.0 Effluent Limits**

	SWP Basin         Stream           20C         352			Stream Nam STONY RUN			
RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
0.680	Pinehurst Manor	PA0238571	0.014	CBOD5	25		-
				NH3-N	2.06	4.12	
				Dissolved Oxygen			5

## WQM 7.0 D.O.Simulation

SWP Basin St	ream Code			Stream Name	
20C	35275			STONY RUN	
<u>RMI</u> 0.680	Total Discharge	enc.	) <u>Ana</u>	ysis Temperature	(°C) Analysis pH 6.536
Reach Width (ft)	Reach Dep	10 00000		Reach WDRatio	Reach Velocity (fps)
1.434 Reach CBOD5 (mg/L)	0.309 Reach Kc (		P	4.647 each NH3-N (mg/L	0.055 .) Reach Kn (1/days)
22.35	1.466 Reach Kr (	3	15	1.82 Kr Equation	1.029 Reach DO Goal (mg/L)
Reach DO (mg/L) 5.374	30.92			Owens	5
Reach Travel Time (days) 0.751	TravTime (days)	Subreach CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)	
	0.075	19.46	1.69	6.20	
	0.150	16.94	1.56	6.51	
	0.225 0.301	14.75 12.84	1.45 1.34	6.74 6.94	
	0.376	11.18	1.24	7.12	
	0.451	9.73	1.15	7.27	
	0.526 0.601	8.47 7.37	1.06 0.98	7.40 7.52	
	0.676	6.42	0.91	7.54	
	0.751	5.59	0.84	7.54	

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## WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
20C	35275	STONY RUN

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
0.68	0 Pinehurst Manor	8.32	9.01	8.32	9.01	1	0
NH3-N (	Chronic Allocati	ons					
NH3-N (	Chronic Allocati  Discharge Name	ons Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction

#### **Dissolved Oxygen Allocations**

		CBC	DD5	<u>NH</u>	<u>3-N</u>	Dissolved	d Oxygen	Critical	Percent
RMI	Discharge Name	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Reach	Reduction
0.68	Pinehurst Manor	25	25	2.06	2.06	5	5	0	0

## WQM 7.0 Hydrodynamic Outputs

	SW	P Basin	Strea	m Code				Stream	<u>Name</u>			
		20C	3	5275				STONY	RUN			
RMI	Stream Flow	PWS With	Net Stream Flow	Disc Analysis Flow	100	Depth	Width	W/D Ratio	Velocity	Reach Trav Time	Analysis Temp	Analysis pH
	(cfs)	(cfs)	(cfs)	(cfs)	(ft/ft)	(ft)	(ft)		(fps)	(days)	(°C)	
Q7-1	0 Flow											
0.680	0.00	0.00	0.00	.0217	0.02228	.309	1.43	4.65	0.06	0.751	25.00	6.54
Q1-1	0 Flow											
0.680	0.00	0.00	0.00	.0217	0.02228	NA	NA	NA	0.05	0.769	25.00	6.52
Q30-	10 Flow	V										
0.680	0.00	0.00	0.00	.0217	0.02228	NA	NA	NA	0.06	0.734	25.00	6.55

## WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	✓
WLA Method	EMPR	Use Inputted W/D Ratio	
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	<b>✓</b>
D.O. Saturation	90.00%	Use Balanced Technology	<b>✓</b>
D.O. Goal	5		

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### Input Data WQM 7.0

	SWP Basin	Strea Cod		Stre	eam Name		RMI	E	levation (ft)	Draina Area (sq m	a	Slope (ft/ft)	PW Withdr (mg	awal	Apply FC
	20C	352	275 STON	Y RUN			0.68	30	1260.00		0.06 0.	.00000		0.00	<b>~</b>
8					St	ream Dat	a								
Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Dept		<u>Tributa</u> np	<u>ry</u> pH	Tem	<u>Stream</u> p	pH	
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C	<b>(</b> )		(°C	)		
Q7-10 Q1-10 Q30-10	0.047	0.00 0.00 0.00	0.00 0.00 0.00	0.000 0.000 0.000	0.000 0.000 0.000	0.0	0.00	0	.00 2	25.00	7.00	2	5.00	7.00	
					Di	scharge l	Data								
			Name	Per	rmit Number	Disc	Permitte Disc Flow (mgd)	D F	isc Res	serve actor	Disc Temp (°C)	Di p	sc H		
		Pineh	urst Manor	PA	0238571	0.0140	0.000	0 0	.0000	0.000	25.0	00	6.50		
					Pa	arameter l	Data								
			į	<sup>D</sup> aramete	r Name		onc C	Frib Conc ng/L)	Stream Conc (mg/L)	Fate Coet (1/day	f				
	-		ODODE												
			CBOD5 Dissolved	Ovvden		,	25.00 4.00	2.00 8.24			50 00				
			NH3-N	Oxygen			25.00	0.00			70				

### Input Data WQM 7.0

	SWP Basin			Stre	eam Name		RMI	Ele	evation (ft)	Drainage Area (sq mi)		With	WS drawal ngd)	Apply FC
	20C	352	275 STON	Y RUN			0.00	00	1180.00	0.	28 0.00	000	0.00	<b>✓</b>
					St	ream Dat	a							
Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	n Tem	<u>Tributary</u> np p	Н	<u>Strea</u> Temp	<u>m</u> pH	
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C	)		(°C)		
Q7-10 Q1-10 Q30-10	0.047	0.00 0.00 0.00	0.00 0.00 0.00	0.000 0.000 0.000	0.000 0.000 0.000	0.0	0.00	0.0	00 2	5.00	7.00	25.00	7.00	lande 1
					Di	scharge	Data							
			Name	Per	rmit Number	Disc	Permitt Disc Flow (mgd)	Dis Flo	sc Res	erve 1 ctor	Disc 「emp (°C)	Disc pH		
						0.000	0.000	0.0	0000	0.000	0.00	7.00	-	
					Pa	rameter	Data							
			1	Paramete	r Name	С	onc (	Trib Conc ng/L)	Stream Conc (mg/L)	Fate Coef (1/days)				
	-		CBOD5				25.00	2.00	0.00					
			Dissolved	Oxvaen			3.00	8.24	0.00					
			NH3-N	- 1, 9011			25.00	0.00	0.00					

#### Attachment 2



## WATER MANAGEMENT SYSTEM OPEN VIOLATIONS BY CLIENT

Client ID: 29145 Client: All

Open Violations: 2

CLIENTID	CLIENT	PF ID	FACILITY	PF KIND	PF STATUS	INSP PROGRAM	PROGRAM SPECIFIC ID	INSPID
29145	RHETT WALLS	478574	PINEHURST MANOR MHP	Community	Active	Safe Drinking Water	5100015	3191997
29145	RHETT WALLS	478574	PINEHURST MANOR MHP	Community	Active	Safe Drinking Water	5100015	3191997

VIOLATION ID	INSPECTION CATEGORY	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR	INSP REGION
917145	PF	05/11/2021	B6A	OTHER VIOLATIONS DEEMED TO BE SIGNIFICANT DEFICIENCIES	VALESKY, RICHARD	NWRO
917146	PF	05/11/2021	B6A	OTHER VIOLATIONS DEEMED TO BE SIGNIFICANT DEFICIENCIES	VALESKY, RICHARD	NWRO