pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	Renewal	Application No.	PA0208728
Facility Type	Municipal	APS ID	985442
Major / Minor	Minor	Authorization ID	1259874

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	Mountaintop Area Municipal Authority	Facility Name	Snow Shoe - Clarence WWTF
Applicant Address	P.O. Box 275	Facility Address	Tennessee Road
	Snow Shoe, PA 16874-0275		Clarence, PA 16829
Applicant Contact	Daniel W. Hall	Facility Contact	Tyler Furrow
Applicant Phone	814-387-4321	Facility Phone	814-387-4321
Client ID	44582	Site ID	251874
Ch 94 Load Status	Not Overloaded	Municipality	Snow Shoe Township
Connection Status	No Limitations	County	Centre
Date Application Received	January 22, 2019	EPA Waived?	Yes
Date Application Accepted	February 14, 2019	If No, Reason	N/A
Purpose of Application	Renewal of NPDES permit		

Summary of Review

INTRODUCTION

Daniel W. Hall, Mountaintop Area Municipal Authority (MAMA) Chairman, proposed the renewal of the existing National Pollution Discharge Elimination System (NPDES) permit authorizing the discharge of treated domestic wastewater from the Snow Shoe-Clarence wastewater treatment facility (WWTF).

APPLICATION

Hall submitted the National Pollution Discharge Elimination System (NPDES) Application for Individual Permit to Discharge Sewage Effluent from Minor Sewage Facilities (DEP #3800-PM-BCW0342b). This application was received by the Department on January 22, 2019 and was considered administratively complete on February 14, 2019. The client contact is Daniel Hall. His additional contact information is (email) mama1993@verizon.net. The site contact is Tyler Furrow, Plant Operator. His additional contact information is (email) mama1993@verizon.net. The consulting engineer is Benjamin R. Burns, PE, Project Manager for Herbert, Rowland & Grubic, Inc. of State College, PA. His contact information is (phone) 814-238-7117 and (email) bburns@hrg-inc.com.

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. The case file, permit application package and draft permit will be available for public review at Department's Northcentral Regional Office. The address for this office is 208 West Third Street, Suite 101, Williamsport, PA 17701. An appointment can be made to review these materials during the comment period by calling the file coordinator at 570-327-3636.

CONTINUED on the next page.

Approve	Deny	Signatures	Date
		Jeffrey J. Gocek, EIT — Project Manager	
		Nicholas W. Hartranft, PE — Environmental Engineer Manager	

DISCHARGE, RECEIVING WATERS AND WATER SUPPLY INFORMATION

Outfall No.	001	Design Flow (MGD)	0.232
Latitude	41° 03' 09.79"	Longitude	-77° 55' 19.43"
Quad Name	Snow Shoe	Quad Code	1022
Wastewater Description:	Treated domestic wastewater		
Receiving Waters	UNT to North Fork Beech Creek	Stream Code	22781
NHD Com ID	67177734	RMI	3.12
Drainage Area	16.58	Yield (cfs/mi^2)	0.0895
Q_{7-10} Flow (cfs)	1.48	Q_{7-10} Basis	Gage #01547950
Elevation (ft)	1383	Slope (ft/ft)	N/A
Watershed No.	9-C	Chapter 93 Class.	CWF, MF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	Metals, Other Inorganics, pH		
Source(s) of Impairment	Abandoned Mine Drainage		
TMDL Status	Final, 04/01/2005	Name	North Fork Beech Creek Watershed
Nearest Downstream Public Water Supply Intake	Pennsylvania-American Water Company at Milton, PA		
PWS Waters	West Branch Susquehanna River	Flow at Intake (cfs)	1740
PWS RMI	10.6	Distance from Outfall (mi)	110

$Q_{7,10}$ Determination

The $Q_{7,10}$ is the lowest seven consecutive days of flow in a 10-year period and is used for modeling wastewater treatment plant discharges. 25 PA § 96.1 defines $Q_{7,10}$ as "the actual or estimated lowest seven consecutive day average flow that occurs once in 10 years for a stream with unregulated flow or the estimated minimum flow for a stream with regulated flow".

A downstream stream gage, *"Beech Creek at Monument, PA"* (USGS #01547950), was selected as a reference gage. A $Q_{7,10}$ flow for that gage (13.6 CFS) was obtained from *"Selected Streamflow Statistics for Streamgage Locations in and near Pennsylvania"* (USGS Open Files Report 2011-1070). Knowing the drainage area at the discharge (16.58 mi^2) and both the drainage area (152 mi^2) and the $Q_{7,10}$ (13.6 CFS) at the reference gage, the ratio method was used to calculate a $Q_{7,10}$ at the discharge of 1.48 CFS.

See Attachment 01 for the $Q_{7,10}$ determination.

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TREATMENT FACILITY SUMMARY

The Snow Shoe – Clarence WWTF serves both Snow Shoe Borough and Snow Shoe Township. The WWTF has a hydraulic design capacity of 0.232 MGD and an organic design capacity of 395 lb BOD_5/day. Wastewater is conveyed to the WWTF by the Tennessee Road pumping station. The WWTF consists of a comminutor, a distribution box (#1), two aerated lagoons, a distribution box (#2), an erosion chlorinator, a chlorine contact tank and a cascade structure prior to discharge at Outfall 001. The WWTF summary is as follows.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Aerated Lagoon	Hypochlorite	0.232
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.232	395	Not Overloaded	Aerobic Digestion	Other WWTP

See Attachment 02 for a map of the WWTF location.

The existing annual average flow, for the 12 months prior to the application submission, was 0.100 MGD. The highest month of flow, from the previous 12 months, was February 2017 with 0.15 MGD.

See Attachment 03 for a treatment schematic of this facility.

This design was first approved by Water Quality Management (WQM) permit #1494401, which was issued April 7, 1994. This permit was amended on February 6, 1995 to approve wetland delineations and authorize encroachments.

COMPLIANCE

The most recent Department inspection, a compliance evaluation inspection (CEI), was conducted August 16, 2019. No operational problems were noted. Effluent was clear with a pH of 7.0 SU and a TRC concentration of 0.06 mg/L. No impact, either above or below the outfall, was observed in the receiving stream. Ammonia-Nitrogen effluent violations were noted for the month of May 2019. Complete eDMR data was being submitted in a timely fashion.

The WMS Query *Open Violations for Client by Permit Number* revealed no open violations for MAMA at this facility.

Recent effluent violations are as follows.

Parameter	Date	SBC	DMR Value	Units	Limit Value
Ammonia	May 2019	Average Monthly	21.8	lbs/day	19
Ammonia	May 2019	Weekly Average	29.5	lbs/day	29
Ammonia	May 2019	Average Monthly	16.9	mg/L	10
Ammonia	May 2019	Weekly Average	18.5	mg/L	15
Ammonia	July 2019	Weekly Average	15.9	mg/L	15

Recent Discharge Monitoring Report (DMR) data; from September 2018 to August 2019, is presented in the table below.

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Parameter	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18
Flow (MGD) Average Monthly	0.101	0.121	0.205	0.122	0.102	0.109	0.144	0.150	0.172	0.174	0.152	0.169
Flow (MGD) Weekly Average	0.156	0.211	0.319	0.270	0.165	0.271	0.226	0.199	0.285	0.290	0.222	0.232
pH (S.U.) Minimum	7.4	7.4	7.5	7.3	7.3	7.4	7.9	8.1	7.9	7.8	7.4	7.6
pH (S.U.) Instantaneous Maximum	7.6	7.7	7.9	7.9	7.4	7.8	8.0	8.3	8.1	8.0	7.9	8.0
TRC (mg/L) Average Monthly	0.33	0.29	0.38	0.33	0.40	0.44	0.27	0.39	0.28	0.25	0.35	0.36
TRC (mg/L) Instantaneous Maximum	0.41	0.55	0.56	0.59	0.42	0.60	0.62	0.59	0.60	0.59	0.66	0.48
CBOD5 (lbs/day) Average Monthly	< 2.0	< 2.4	< 3.7	< 3.0	< 3.8	6.0	< 2.4	< 5.0	< 5.4	< 6.0	< 3.0	< 4.0
CBOD5 (lbs/day) Weekly Average	3.0	< 2.4	4.3	< 3.9	9.0	8.7	< 2.4	13	10	10	4.0	7.0
CBOD5 (mg/L) Average Monthly	< 2.8	< 2.4	< 2.7	< 2.4	< 3.9	< 5.0	< 2.4	< 3.76	< 3.1	< 3.2	< 2.4	< 3
CBOD5 (mg/L) Weekly Average	4.0	< 2.4	4.0	< 2.4	10	7.0	< 2.4	9.0	4.0	6.0	3.0	4.0
BOD5 (lbs/day) Raw Influent Average Monthly	47	46	< 84.5	68	79	65	62	100	105	90	90	97
BOD5 (lbs/day) Raw Influent Weekly Average	81	74	120	73	99	72	112.6	136.1	157	99	125	122
BOD5 (mg/L) Raw Influent Average Monthly	< 76	< 65	< 64	56	82	64	71	85	72	50	72	69
TSS (lbs/day) Average Monthly	6.0	11	10	16	18	22	13	15	16	15	6.0	16
TSS (lbs/day) Raw Influent Average Monthly	28	33	65	79	40	68	43	44	77	54	66	32
TSS (lbs/day) Raw Influent Weekly Average	54	51	91	120	45	130	47.5	49	118	67	98	45
TSS (lbs/day) Weekly Average	10	30.9	16.26	24.1	29	32.3	24.9	29.2	26	18	12	34
TSS (mg/L) Average Monthly	9.0	7.0	7.0	13	19	10	11	12	10	10	< 4.4	10
TSS (mg/L) Raw Influent Average Monthly	46	48	48	71	41	62	40	35	54	30	49	33
TSS (mg/L) Weekly Average	12	13	13	15	33	26	15	20	12	12	8.0	19
Fecal Coliform (CFU/100 ml) Geometric Mean	< 1.0	< 1.0	< 1.0	< 1.0	< 3.4	< 1.0	< 1.0	< 1.0	< 5.6	389	< 1.2	< 37
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	1.0	< 1.0	< 1.0	< 1.0	10.5	1.0	< 1.0	< 1.0	18.5	1553	3.0	< 2420
Total Nitrogen (lbs/day) Average Monthly	2.3	11.5	14.06	15.2	15.5	15.9	20	29.8	23.1	24.6	20	13
Total Nitrogen (mg/L) Average Monthly	2.8	11.8	7.84	18.2	17.4	19.3	20.2	18.2	16.5	12.9	12.6	18.3
Ammonia (lbs/day) Average Monthly	0.1	7.3	7.1	21.8	14.2	13.4	13.4	16.6	25.5	26.8	3.5	8.7
Ammonia (lbs/day) Weekly Average	0.19	15.6	16.58	29.5	20.6	20.4	22.2	21.7	39.2	39.2	10.3	19.8
Ammonia (mg/L) Average Monthly	0.2	8.6	4.4	16.9	14.3	12.1	10.7	13.2	16.1	14.3	2.6	5.5
Ammonia (mg/L) Weekly Average	0.3	15.9	10.3	18.5	18.8	16.6	15.1	15.7	17.1	16.2	7.5	11.2
Total Phosphorus (lbs/day) Average Monthly	3.4	3.2	5.5	2.9	2.5	2	2.6	3.38	3.2	6.1	5.7	3.5
Total Phosphorus (mg/L) Average Monthly	4.08	3.28	3.07	3.51	2.78	2.42	2.6	2.07	2.3	3.2	3.6	4.9
Total Aluminum (lbs/day) Average Monthly									< 0.08			
Total Aluminum (mg/L) Average Monthly									< 0.05			
Total Iron (lbs/day) Average Monthly									0.24			
Total Iron (mg/L) Average Monthly									0.16			
Total Manganese (lbs/day) Average Monthly									0.08			
Total Manganese (mg/L) Average Monthly									0.05			

EXISTING PERMIT LIMITATIONS

The following limitations were established at the last renewal issuance, which occurred October 07, 2013.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass (lb/day)		Concentration (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Average Weekly	Instant. Maximum		
Flow	Report	Report	XXX	XXX	XXX	XXX	Continuous	Meter
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/Day	Grab
Fecal Coliform (#/100mL) *05/01-09/30*	XXX	XXX	XXX	200	XXX	1,000	1/Week	Grab
Fecal Coliform (#/100mL) *10/01-04/30*	XXX	XXX	XXX	2,000	XXX	10,000	1/Week	Grab
BOD_5 *Raw Sewage Influent*	Report	Report	XXX	Report	XXX	XXX	1/Week	8 Hour Comp
Total Suspended Solids *Raw Sewage Influent*	Report	Report	XXX	Report	XXX	XXX	1/Week	8 Hour Comp
$CBOD_5$	48	77	XXX	25	40	50	1/Week	8 Hour Comp
Total Suspended Solids	87	125	XXX	45	65	90	1/Week	8 Hour Comp
Total Residual Chlorine	XXX	XXX	XXX	0.6	XXX	2.0	1/Day	Grab
Ammonia-N *05/01-10/31*	19	29	XXX	10	15	21	1/Week	8 Hour Comp
Ammonia-N *11/01-04/30*	58	87	XXX	30	45	63	1/Week	8 Hour Comp
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/Month	8 Hour Comp
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	1/Month	8 Hour Comp
Total Aluminum	Report	XXX	XXX	Report	XXX	XXX	1/Year	8 Hour Comp
Total Iron	Report	XXX	XXX	Report	XXX	XXX	1/Year	8 Hour Comp
Total Manganese	Report	XXX	XXX	Report	XXX	XXX	1/Year	8 Hour Comp

DEVELOPMENT OF EFFLUENT LIMITATIONS

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)

Total Residual Chlorine

The Department's *TRC_CALC spreadsheet* is a model used to evaluate Total Residual Chlorine (TRC) effluent limitations. This model determines applicable acute and chronic wasteload allocations (WLAs) for TRC based on the data supplied by the user and then compares the WLAs to the technology-based average monthly limit using the procedures described in the EPA Technical Support Document (for Water Quality-based Toxics Control).

Parameter	Effluent Limitations (mg/L)	
	Monthly Average	IMAX
Total Residual Chlorine	0.50	1.6

CONTINUED on the next page.

See Attachment 04 for the TRC_CALC output.

Based on historical DMR data, this WWTF can meet the proposed more stringent monthly average TRC limitation.

Water Quality-Based Limitations

$CBOD_5$, NH_3-N and DO

WQM 7.0 for Windows is a DEP computer model used to determine wasteload allocations and effluent limitations for $CBOD_5$, NH_3-N and DO for single and multiple point source discharge scenarios. This model simulates two basic processes. The NH_3-N module simulates the mixing and degradation of NH_3-N in the stream and compares calculated instream NH_3-N concentrations to the water quality criteria. The DO module simulates the mixing and consumption of DO in the stream due to degradation of $CBOD_5$ and NH_3-N and compares the calculated instream DO concentrations to the water quality criteria. The model then determines the highest pollutant loading the stream can assimilate and still meet water quality under design conditions.

This model recommended the following limitations. The existing water quality-based limitations were used as model inputs and proved to again be more stringent than technology-based limitations calculated by the model.

Parameter	Effluent Limitations (mg/L)		
	30 Day Average	Maximum	Minimum
$CBOD_5$	25		
NH_3-N	10.55	21.1	
DO			3.0

See Attachment 05 for the WQM model output.

Best Professional Judgment (BPJ) Limitations

Total Suspended Solids

An annual TSS relaxation was first requested by HRG Engineering (consultant), on behalf of the MAMA, in a letters dated July 14, 2003 and September 25, 2003. In this letter the consulting engineer cited the following reasons for applying 40 CFR § 133.103(c) to this permit; long detention times, past violation history, winter freezing and stratification/overturning. Prior to this request, the permit contained a seasonal (summer) TSS relaxation. Because of the long detention times and large exposed surface area of the lagoons, the treatment facility experiences frequent algal blooms, stratification and surface freezing. These factors, and the TSS violations preceding the request, qualified this permit to receive the annual relaxed TSS limitations. This relaxation was first approved in the October 22, 2003 NPDES renewal.

Because data showed that this system can meet the secondary treatment technology-based effluent limitations for TSS, the Department is revoking the 2003 TSS variance and assigning the technology-based limits as the effluent limitations. As shown in the table above, *secondary sewage treatment* is defined as not exceeding 25 mg/L monthly average $CBOD_5$ and 30 mg/L monthly average TSS, as well as not exceeding 40 mg/L weekly average $CBOD_5$ and 45 mg/L weekly average TSS.

Ammonia-Nitrogen

The applicable seasonal concentration limit multiplier, in accordance with the Department's *Determining Water Quality-Based Effluent Limits* (DEP #391-2000-003), will be continued in this issuance. See below.

Parameter	Time Period	Multiplier
NH_3-N	November 01 through April 30	3.0

Anti-Backsliding

In order to comply with 40 CFR § 122.44(l) (anti-backsliding requirements), the Department must issue a renewed permit with limitations as stringent as that the of the previous permit.

No less stringent limitations have been proposed for this draft.

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DEVELOPMENT OF EFFLUENT MONITORING

Chesapeake Bay TMDL

Despite 25 years of extensive restoration efforts, the Chesapeake Bay Total Maximum Daily Load (TMDL) was prompted by insufficient progress and continued poor water quality in the Chesapeake Bay and its tidal tributaries. This TMDL, required by the Clean Water Act, is the largest ever developed by the Environmental Protection Agency (EPA). This document identifies the necessary pollution reductions of nitrogen, phosphorus and sediment across Delaware, Maryland, New York, Virginia, West Virginia, District of Columbia and Pennsylvania. It also sets pollution limits necessary to meet applicable water quality standards in the Bay, tidal rivers and embayments.

Pennsylvania explains how and when it will meet its pollution allocations in its Watershed Implementation Plan (WIP), which is incorporated into the TMDL. Pennsylvania's permitting strategy for significant dischargers has been outlined in the Phase I WIP and incorporated in the Phase II WIP by reference, and imposes Total Nitrogen (TN) and Total Phosphorus (TP) cap loads on the significant dischargers.

Because the design flow of this facility is greater than or equal to 0.2 MGD but less than 0.4 MGD, the Department considers this a Phase 4 sewage facility (for the purposes of implementing the Chesapeake Bay TMDL). According to the Department's *Supplement to Phase II Watershed Implementation Plan* (revised November 09, 2018) renewed Phase IV NPDES permits are required to contain monitoring and reporting for Total Nitrogen (TN) and Total Phosphorus (TP) throughout the permit term at a frequency no less than monthly.

Influent Sampling

In accordance with the Department's *SOP for New and Reissuance Sewage Individual NPDES Permit Applications* (unnumbered), influent sampling for BOD_5 and TSS is required for all POTWs with design flows greater than 2,000 gallons per day (gpd). The Department considers the existing *1/Week* monitoring adequate for characterizing the influent.

TMDL

The receiving stream, North Fork Beech Creek, is considered impaired by the Department. This indicates that this stream is not meeting its designated uses. Because of that fact, a Total Maximum Daily Load (TMDL) was finalized for this waterbody on January 13, 2005. A TMDL sets a ceiling on the pollutant loads that can enter a waterbody so that the waterbody will meet water quality standards. This TMDL was approved by EPA on April 1, 2005. The cause of the impairment is Metals, pH and Other Inorganics, while the source of the impairment is Abandoned Mine Drainage.

Monitoring of the TMDL pollutants of concern (Al, Fe and Mn) is required, in accordance with 40 CFR § 122.44(d)(1)(vii)(B), to ensure that this discharge is not contributing to the impairment of this waterbody. Once per year monitoring will be required.

Dissolved Oxygen

As a new parameter being introduced into a renewed permit, the Department is requiring monitoring to verify reasonable potential for the next permit application review. This parameter is being introduced per policy.

RECEIVING STREAM

Stream Characteristics

The receiving stream is North Fork Beech Creek. This stream, according to 25 PA § 93.9L, is protected for Cold Water Fishes (CWF) and Migratory Fishes (MF). These are the streams *Designated Uses*, which is defined in 25 PA § 93.1 as "those uses specified in §§ 93.9a – 93.9z for each waterbody or segment whether or not the use is being attained". Designated uses are regulations promulgated by the Environmental Quality Board (EQB) throughout the rulemaking process. This stream currently has no *Existing Use*. Existing Use is defined in 25 PA § 93.1 as "those uses actually attained in the waterbody on or after November 28, 1975 whether or not they are included in the water quality standards".

This Unnamed Tributary to Susquehanna River is identified by Department stream code 22781. The stream is located in (Chapter 93) drainage list L and State Water Plan 9C (Bald Eagle Creek).

Impairment

Department data indicates that North Fork Beech Creek is not attaining its designated uses for supporting aquatic life. See the TMDL section above.

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ADDITIONAL CONSIDERATIONS

Hauled-In Wastes

According to the application materials, the MAMA Snow Shoe-Clarence WWTP has received hauled-in wastes during the past three years and anticipates receiving hauled-in wastes in the next five years. The past three-year average (from 2015 through 2017) of hauled-in waste is 48,333 gallons as an annual average.

Whole Effluent Toxicity (WET) Testing

According to the application materials, the MAMA Snow Shoe-Clarence WWTP does not accept wastewater from industrial users. Because of this, a WET test evaluation is not required.

Rounding of Limitations

Limitations have been rounded in accordance with the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits* (#362-0400-001).

Limit Multipliers

The instantaneous maximum limitations have been calculated using multipliers of 2.0 (for conventional pollutants) and 2.5 (for toxic pollutants) for determining the monthly average. This practice is in accordance with the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits* (#362-0400-001).

Sample Frequencies and Types

The sample type and minimum measurement frequencies are in accordance with the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits* (#362-0400-001).

Standard Operating Procedures (SOPs)

The review of this permit application was performed in accordance with the Department's *SOP for New and Reissuance Sewage Individual NPDES Permit Applications* and *SOP for Establishing Effluent Limitations for Individual Sewage Permits* (SOP #BPNPSM-PMT-033).

Special Permit Conditions

Stormwater Prohibition
Approval Contingencies
Proper Waste Disposal
Solids Management (Lagoon Systems) (PC111)

Supplemental Discharge Monitoring Reports

Daily Effluent Monitoring
Non-Compliance Reporting
Biosolids Production and Disposal
Hauled-in Municipal Waste
Influent and Process Control
Lab Accreditation

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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) and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass (lb/day)		Concentration (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Average Weekly	Instant. Maximum		
Flow	Report	Report	XXX	XXX	XXX	XXX	Continuous	Meter
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/Day	Grab
Dissolved Oxygen	XXX	XXX	Report	XXX	XXX	XXX	1/Week	Grab
Fecal Coliform (#/100mL) *05/01-09/30*	XXX	XXX	XXX	200	XXX	1,000	1/Week	Grab
Fecal Coliform (#/100mL) *10/01-04/30*	XXX	XXX	XXX	2,000	XXX	10,000	1/Week	Grab
BOD_5 *Raw Sewage Influent*	Report	Report	XXX	Report	XXX	XXX	1/Week	8 Hour Comp
Total Suspended Solids *Raw Sewage Influent*	Report	Report	XXX	Report	XXX	XXX	1/Week	8 Hour Comp
$CBOD_5$	48	77	XXX	25	40	50	1/Week	8 Hour Comp
Total Suspended Solids	58	87	XXX	30	45	60	1/Week	8 Hour Comp
Total Residual Chlorine	XXX	XXX	XXX	0.5	XXX	1.6	1/Day	Grab
Ammonia-N *05/01-10/31*	19	29	XXX	10	15	21	1/Week	8 Hour Comp
Ammonia-N *11/01-04/30*	58	87	XXX	30	45	63	1/Week	8 Hour Comp
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/Month	8 Hour Comp
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	1/Month	8 Hour Comp
Total Aluminum	Report	XXX	XXX	Report	XXX	XXX	1/Year	8 Hour Comp
Total Iron	Report	XXX	XXX	Report	XXX	XXX	1/Year	8 Hour Comp
Total Manganese	Report	XXX	XXX	Report	XXX	XXX	1/Year	8 Hour Comp

END of Fact Sheet.