

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0208736
APS ID 985436
Authorization ID 1259866

Applicant and Facility Information

Applicant Name	<u>Mountaintop Area Municipal Authority</u>	Facility Name	<u>Moshannon WWTF</u>
Applicant Address	<u>P.O. Box 275</u> <u>Snow Shoe, PA 16874-0275</u>	Facility Address	<u>Turkey Eye Lane</u> <u>Moshannon, PA 16859</u>
Applicant Contact	<u>Daniel W. Hall</u>	Facility Contact	<u>Tyler Furrow</u>
Applicant Phone	<u>814-387-4321</u>	Facility Phone	<u>814-387-4321</u>
Client ID	<u>44582</u>	Site ID	<u>251844</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Snow Shoe Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Centre</u>
Date Application Received	<u>January 22, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>February 14, 2019</u>	If No, Reason	<u>N/A</u>
Purpose of Application	<u>Renewal of NPDES permit</u>		

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 Moshannon 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.

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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.	<u>001</u>	Design Flow (MGD)	<u>0.038</u>
Latitude	<u>41° 1' 52.73"</u>	Longitude	<u>-78° 1' 46.32"</u>
Quad Name	<u>Karhas, PA</u>	Quad Code	<u>41078</u>
Wastewater Description:	<u>Sewage Effluent</u>		
Receiving Waters	<u>UNT to Black Moshannon Creek</u>	Stream Code	<u>25705</u>
NHD Com ID	<u>61829593</u>	RMI	<u>0.85</u>
Drainage Area	<u>1.8</u>	Yield (cfs/mi ²)	<u>0.0894</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.161</u>	Q ₇₋₁₀ Basis	<u>Gage #01547950, EcoFlow</u>
Elevation (ft)	<u>1353</u>	Slope (ft/ft)	<u>N/A</u>
Watershed No.	<u>8-D</u>	Chapter 93 Class.	<u>HQ-CWF</u>
Existing Use	<u>N/A</u>	Existing Use Qualifier	<u>N/A</u>
Exceptions to Use	<u>N/A</u>	Exceptions to Criteria	<u>N/A</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Metals, Siltation</u>		
Source(s) of Impairment	<u>Abandoned Mine Drainage</u>		
TMDL Status	<u>Final, 06/09/2009</u>	Name	<u>Moshannon Creek Watershed</u>
Nearest Downstream Public Water Supply Intake	<u>Pennsylvania-American Water Company at Milton, PA</u>		
PWS Waters	<u>West Branch Susquehanna River</u>	Flow at Intake (cfs)	<u>1740</u>
PWS RMI	<u>10.6</u>	Distance from Outfall (mi)	<u>129</u>

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 nearby stream gage, "Beech Creek at Monument, PA" (USGS #01547950), was recommended by the EcoFlow program, which utilizes USGS data from the StreamStats program to find existing gages from similar watersheds. 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 (1.8 mi²) and both the drainage area (152 mi²) and the Q_{7,10} (13.6 CFS) at the reference gage, the Q_{7,10} at the discharge was calculated to 0.161 CFS.

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

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TREATMENT FACILITY SUMMARY

The Moshannon WWTF serves the community of Moshannon, PA in Snow Shoe Township. The WWTF has a hydraulic design capacity of 0.038 MGD and an organic design capacity of 65 lb BOD₅/day. The WWTF consists of an influent wet well, raw sewage pumps, influent equalization tank, influent equalization pumps, an aeration tank, sludge return pumps, a clarifier, erosion chlorination, a chlorine contact tank, dechlorination and a digester. The WWTF summary is as follows.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Extended Aeration	Erosion Chlorination	0.038
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/ Disposal
0.038	65	Not Overloaded	Aerobic Digestion	Other WWTF

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 0.015 MGD. The highest month of flow, from the previous 12 months, was May 2017 with 0.02 MGD.

This design was first approved by Water Quality Management (WQM) permit #1494402, which was issued April 7, 1994. This permit was amended on February 6, 1995 to approve a pump station, not included in the original design. The permit was amended a second time June 17, 2016 to approve a dechlorination system to comply with the 0.02 mg/L Total Residual Chlorine limit (included in the 2014 NPDES issuance).

COMPLIANCE

The most recent Department inspection, a compliance evaluation inspection (CEI), was conducted November 05, 2019. No operational problems were noted. Effluent was clear with a pH of 7.39 SU and a TRC concentration of 0.01 mg/L. No impact, either above or below the outfall, was observed in the receiving stream. Ammonia-Nitrogen effluent violations were noted for the months of August and September 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
TRC	01/31/19	Average Monthly	0.03	mg/L	0.02
TRC	12/31/18	Average Monthly	0.05	mg/L	0.02
TRC	04/30/19	Average Monthly	0.03	mg/L	0.02
Ammonia	08/31/19	Average Monthly	3.8	lbs/day	2
Ammonia	08/31/19	Weekly Average	3.8	lbs/day	3
Ammonia	08/31/19	Average Monthly	35.2	mg/L	7
Ammonia	08/31/19	Weekly Average	35.4	mg/L	10

Recent Discharge Monitoring Report (DMR) data; from September 1, 2018 to August 31, 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	0.015	0.017	0.018	0.011	0.009	0.012	0.13	0.013	0.013	0.015	0.018	0.022
Flow (MGD) Weekly Average	0.020	0.024	0.053	0.029	0.029	0.20	0.028	0.016	0.010	0.023	0.0275	0.032
pH (S.U.) Minimum	7.4	7.3	7.3	7.2	7.2	7.3	7.5	7.2	6.7	7.9	7.4	7.4
pH (S.U.) Instantaneous Maximum	7.5	7.7	7.6	7.5	7.3	7.7	8.1	7.6	7.9	8.0	7.9	7.8
TRC (mg/L) Average Monthly	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.05	0.02	0.02	0.02
CBOD5 (lbs/day) Average Monthly	< 0.3	< 1.0	< 0.4	< 0.4	< 2.4	< 2.4	< 2.4	2.7	< 2.4	< 0.35	< 0.3	< 0.7
CBOD5 (lbs/day) Weekly Average	0.4	< 1.0	0.1	0.5	< 2.4	< 2.4	< 2.4	3.0	< 2.4	0.4	< 0.4	< 1.0
CBOD5 (mg/L) Average Monthly	< 3.2	< 2.2	< 1.7	< 3.7	< 2.4	< 2.4	< 4.2	0.27	< 6.0	< 2.6	< 2.4	< 2.4
CBOD5 (mg/L) Weekly Average	4.0	2.0	1.0	5.0	< 2.4	< 2.4	6.0	0.33	< 6	3.0	< 2.4	< 2.4
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	7.0	31	29	15	15	13	10	140	16	12	15	26
BOD5 (lbs/day) Raw Sewage Influent Weekly Average	9.0	53	37	21	22	15	14	170	16	18	21	26
BOD5 (mg/L) Raw Sewage Influent Average Monthly	63	210	146	124	156	178	101	13	163	110	115	152
TSS (lbs/day) Average Monthly	1.3	0.6	< 0.6	0.7	0.2	0.4	< 1.9	4.0	< 2.0	0.5	0.4	1.9
TSS (lbs/day) Raw Sewage Influent Average Monthly	3.0	24	32	12	11	9.0	5.0	54	12	10	13	14
TSS (lbs/day) Raw Sewage Influent Weekly Average	4.0	41	45	19	17	11	6.0	68	12	14	20	19
TSS (lbs/day) Weekly Average	1.8	0.9	0.9	1.1	0.33	0.58	1.4	4.0	< 2.0	0.5	0.5	3.0
TSS (mg/L) Average Monthly	12	5.0	< 2.5	7.0	3.0	6.0	10	0.3	< 2.0	4.0	3.0	6.0
TSS (mg/L) Raw Sewage Influent Average Monthly	28	164	149	96	106	116	51	5.0	115	84	99	98
TSS (mg/L) Weekly Average	17	7.0	3.0	11	3.0	7.0	12	0.43	< 2.0	4.0	4.0	8.0
Fecal Coliform (CFU/100 ml) Geometric Mean	< 6.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.5	< 3.1	7.8	< 2.0	17.4	< 1.0	< 2.0
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	11	1.0	1.0	1.0	1.0	2.0	5.2	14.6	2.0	32.7	< 1.0	3.1
Total Nitrogen (lbs/day) Average Monthly									2.1			
Total Nitrogen (mg/L) Average Monthly									10.8			
Ammonia (lbs/day) Average Monthly	3.8	0.26	0.05	0.03	0.15	0.51	< 1.3	0.2	< 1.0	1.7	0.47	0.03
Ammonia (lbs/day) Weekly Average	3.8	0.5	0.05	0.04	0.29	1.0	1.6	0.28	< 1.0	2.0	0.74	0.04
Ammonia (mg/L) Average Monthly	35.2	1.9	0.2	0.3	1.5	7.7	8.6	0.02	0.19	17.1	3.5	0.2
Ammonia (mg/L) Weekly Average	35.4	3.6	0.28	0.38	2.72	15.2	13.5	0.02	0.19	22	5.9	0.25
Total Phosphorus (lbs/day) Average Monthly									0.6			

Total Phosphorus (mg/L) Average Monthly									2.9			
Total Aluminum (lbs/day) Average Monthly									< 0.01			
Total Aluminum (mg/L) Average Monthly									< 0.05			
Total Iron (lbs/day) Average Monthly									0.02			
Total Iron (mg/L) Average Monthly									0.09			
Total Manganese (lbs/day) Average Monthly									0.04			
Total Manganese (mg/L) Average Monthly									0.22			

EXISTING PERMIT LIMITATIONS

The following limitations were established at the last renewal issuance, which occurred June 23, 2014.

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	2/Month	Grab
Fecal Coliform (#/100mL) 10/01-04/30	XXX	XXX	XXX	2,000	XXX	10,000	2/Month	Grab
BOD ₅ Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	2/Month	8 Hour Comp
Total Suspended Solids Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	2/Month	8 Hour Comp
CBOD ₅	7	13	XXX	25	40	50	2/Month	8 Hour Comp
Total Suspended Solids	9	14	XXX	30	45	60	2/Month	8 Hour Comp
Total Residual Chlorine	XXX	XXX	XXX	0.02	XXX	XXX	1/Day	Grab
Ammonia-N 05/01-10/31	2	3	XXX	7	10	14	2/Month	8 Hour Comp
Ammonia-N 11/01-04/30	6	9	XXX	21	30	42	2/Month	8 Hour Comp
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/Year	8 Hour Comp
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	1/Year	8 Hour Comp
Total Aluminum	XXX	Report	XXX	Report	XXX	XXX	1/Year	8 Hour Comp
Total Iron	XXX	Report	XXX	Report	XXX	XXX	1/Year	8 Hour Comp
Total Manganese	XXX	Report	XXX	Report	XXX	XXX	1/Year	8 Hour Comp

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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)

Water Quality-Based Limitations

Total Residual Chlorine

25 PA § 92a.48(b)(3) states “facilities using chlorination that discharge to an Exceptional Value (EV) water, or to a High Quality (HQ) water where economic or social justification under 25 PA § 93.4(c) has not been demonstrated under applicable State or Federal law or regulations, shall discontinue chlorination or dechlorinate their effluent prior to discharge in the waters”.

The permit will continue the existing monthly average 0.02 mg/L (“non-detectable”) TRC effluent limit since adequate dechlorination facilities were installed and no TRC has been detected in the effluent.

CBOD₅, NH₃-N and DO

WQM 7.0 for Windows is a DEP computer model used to determine wasteload allocations and effluent limitations for CBOD₅, NH₃-N and DO for single and multiple point source discharge scenarios. This model simulates two basic processes. The NH₃-N module simulates the mixing and degradation of NH₃-N in the stream and compares calculated instream NH₃-N concentrations to the water quality criteria. The DO module simulates the mixing and consumption of DO in the stream due to degradation of CBOD₅ and NH₃-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	8.35	16.7	
DO			3.0

See Attachment 03 for the WQM model output.

Best Professional Judgment (BPJ) Limitations

In the absence of applicable effluent guidelines for the discharge or pollutant, permit writers must identify and/or develop needed technology-based effluent limitations (TBELs) TBELs on a case-by-case basis, in accordance with the statutory factors specified in the Clean Water Act.

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Seasonal Limitation

The applicable seasonal 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	May 1 through October 31	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 of the previous permit. Despite the WQM 7.0 model now recommending less stringent Ammonia limitations, the Department will maintain the existing limitations. See below.

Parameter	Effluent Limitations (mg/L)		
	Monthly Average	Weekly Average	IMAX
NH ₃ -N (05/01-10/31)	7.0	10	14
NH ₃ -N (11/01-04/30)	21	30	42

DEVELOPMENT OF EFFLUENT MONITORINGChesapeake 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 less than 0.2 MGD, the Department considers this a Phase 5 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 5 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 annually.

Influent Sampling

In accordance with the Department's *SOP for New and Reissuance Sewage Individual NPDES Permit Applications* (unnumbered), influent sampling for BOD₅ and TSS is required for all POTWs with design flows greater than 2,000 gallons per day (gpd). The Department considers the existing 2/Month monitoring adequate for characterizing the influent.

TMDL

The receiving stream, Unnamed Tributary to Black Moshannon 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 May 27, 2009. 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 June 09, 2009. The cause of the impairment is Metals and Siltation, while the source of the impairment is Acid 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.

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RECEIVING STREAM

Stream Characteristics

The receiving stream is Unnamed Tributary to Black Moshannon Creek. This stream, according to 25 PA § 93.9L, is protected for High-Quality Cold-Water Fishes (HQ-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 Black Moshannon Creek is identified by Department stream code 25705. The stream is located in (Chapter 93) drainage list L and State Water Plan 8D (Moshannon and Mosquito Creeks).

Impairment

Department data indicates that Unnamed Tributary to Black Moshannon Creek is not attaining its designated uses for supporting aquatic life. See the TMDL section above.

ADDITIONAL CONSIDERATIONS

Hauled-In Wastes

According to the application materials, the MAMA Moshannon WWTP has not received hauled-in wastes during the past three years and does not anticipate receiving hauled-in wastes in the next five years.

Whole Effluent Toxicity (WET) Testing

According to the application materials, the MAMA Moshannon 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 #BNPNSM-PMT-033).

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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

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 <small>Instant. Min</small>	XXX	XXX	9.0	1/Day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.02	XXX	XXX	1/Day	Grab
Dissolved Oxygen	XXX	XXX	Report <small>Instant. Min</small>	XXX	XXX	XXX	1/Day	Grab
Fecal Coliform (#/100mL) <i>05/01-09/30</i>	XXX	XXX	XXX	200	XXX	1,000	2/Month	Grab
Fecal Coliform (#/100mL) <i>10/01-04/30</i>	XXX	XXX	XXX	2,000	XXX	10,000	2/Month	Grab
BOD ₅ <i>Raw Sewage Influent</i>	Report	Report	XXX	Report	Report	XXX	2/Month	8 Hour Comp
Total Suspended Solids <i>Raw Sewage Influent</i>	Report	Report	XXX	Report	Report	XXX	2/Month	8 Hour Comp
CBOD ₅	7.0	13	XXX	25	40	50	2/Month	8 Hour Comp
Total Suspended Solids	9.0	14	XXX	30	45	60	2/Month	8 Hour Comp
Ammonia-N <i>05/01-10/31</i>	2.0	3.0	XXX	7.0	10	14	2/Month	8 Hour Comp
Ammonia-N <i>11/01-04/30</i>	6.0	9.0	XXX	21	30	42	2/Month	8 Hour Comp
Total Nitrogen	Report <small>Annual Avg.</small>	XXX	XXX	Report <small>Annual Avg.</small>	XXX	XXX	1/Year	8 Hour Comp
Total Phosphorus	Report <small>Annual Avg.</small>	XXX	XXX	Report <small>Annual Avg.</small>	XXX	XXX	1/Year	8 Hour Comp
Total Aluminum	Report <small>Annual Avg.</small>	XXX	XXX	Report <small>Annual Avg.</small>	XXX	XXX	1/Year	8 Hour Comp
Total Iron	Report <small>Annual Avg.</small>	XXX	XXX	Report <small>Annual Avg.</small>	XXX	XXX	1/Year	8 Hour Comp
Total Manganese	Report <small>Annual Avg.</small>	XXX	XXX	Report <small>Annual Avg.</small>	XXX	XXX	1/Year	8 Hour Comp

END of Fact Sheet.