

**Northwest Regional Office  
CLEAN WATER PROGRAM**

Application Type Renewal  
 Facility Type Industrial  
 Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL INDUSTRIAL WASTE (IW)  
AND IW STORMWATER**

Application No. PA0044016  
 APS ID 962792  
 Authorization ID 1219412

**Applicant and Facility Information**

Applicant Name	<u>PA Fish &amp; Boat Commission Hatcheries Bureau</u>	Facility Name	<u>Linesville Fish Culture Station</u>
Applicant Address	<u>Benner Spring Fish Research Station 1735 Shiloh Road State College, PA 16801-8495</u>	Facility Address	<u>13300 Hartstown Road Linesville, PA 16424-5434</u>
Applicant Contact	<u>Mindy McClenahan</u>	Facility Contact	<u></u>
Applicant Phone	<u>(814) 353-2229</u>	Facility Phone	<u></u>
Client ID	<u>135455</u>	Site ID	<u>241007</u>
SIC Code	<u>0921</u>	Municipality	<u>Pine Township</u>
SIC Description	<u>Agriculture - Fish Hatcheries And Preserves</u>	County	<u>Crawford</u>
Date Application Received	<u>February 22, 2018</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>March 14, 2018</u>	If No, Reason	<u></u>
Purpose of Application	<u>Application for a renewal of an NPDES permit for an existing discharge of treated Industrial waste</u>		

**Summary of Review**

No significant changes to the facilities operation has occurred since the previous permit renewal.

PPC Plan was last updated 12/01/2017.

There are currently no open violations listed in EFACTS for this permittee. (11/19/2018)

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	Return	Deny	Signatures	Date
X			Adam J. Pesek, E.I.T. / Environmental Engineering Specialist	
X			Justin C. Dickey, P.E. / Environmental Engineer Manager	

**Discharge, Receiving Waters and Water Supply Information**

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.2039</u>
Latitude	<u>41° 38' 38.17"</u>	Longitude	<u>80° 25' 32.81"</u>
Outfall No.	<u>002</u>	Design Flow (MGD)	<u>0.0458</u>
Latitude	<u>41° 38' 31.2324"</u>	Longitude	<u>80° 25' 51.8874"</u>
Outfall No.	<u>003</u>	Design Flow (MGD)	<u>0.2074</u>
Latitude	<u>41° 38' 45.53"</u>	Longitude	<u>80° 25' 43.88"</u>
Outfall No.	<u>004</u>	Design Flow (MGD)	<u>0.1494</u>
Latitude	<u>41° 38' 57.5154"</u>	Longitude	<u>80° 25' 24.2112"</u>
Outfall No.	<u>005</u>	Design Flow (MGD)	<u>0.2021</u>
Latitude	<u>41° 38' 44.27"</u>	Longitude	<u>80° 25' 29.46"</u>
Outfall No.	<u>006</u>	Design Flow (MGD)	<u>0.0535</u>
Latitude	<u>41° 38' 42.08"</u>	Longitude	<u>80° 25' 21.34"</u>
Outfall No.	<u>007</u>	Design Flow (MGD)	<u>0.0481</u>
Latitude	<u>41° 38' 43.15"</u>	Longitude	<u>80° 25' 21.92"</u>
Outfall No.	<u>008</u>	Design Flow (MGD)	<u>0.0481</u>
Latitude	<u>41° 38' 44.08"</u>	Longitude	<u>80° 25' 22.46"</u>
Outfall No.	<u>009</u>	Design Flow (MGD)	<u>0.1732</u>
Latitude	<u>41° 38' 44.5"</u>	Longitude	<u>80° 25' 22.7"</u>
Outfall No.	<u>010</u>	Design Flow (MGD)	<u>0.3312</u>
Latitude	<u>41° 38' 45.42"</u>	Longitude	<u>80° 25' 23.19"</u>
Outfall No.	<u>011</u>	Design Flow (MGD)	<u>0.6504</u>
Latitude	<u>41° 38' 52.17"</u>	Longitude	<u>80° 25' 27.28"</u>
Quad Name	<u>Linesville</u>	Quad Code	<u>02024</u>

Wastewater Description: Fish hatchery propagation water

Receiving Waters	<u>Pymatuning Reservoir (Shenango River)</u>	Stream Code	<u>35482</u>
NHD Com ID	<u>130034576</u>	RMI	<u>---</u>
Drainage Area	<u></u>	Yield (cfs/mi <sup>2</sup> )	<u></u>
Q <sub>7-10</sub> Flow (cfs)	<u></u>	Q <sub>7-10</sub> Basis	<u></u>
Elevation (ft)	<u>1010</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>20-A</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Impaired – Aquatic Life</u>		
Cause(s) of Impairment	<u>Impaired by pollution</u>		
Source(s) of Impairment	<u></u>		
TMDL Status	<u></u>	Name	<u></u>
Nearest Downstream Public Water Supply Intake	<u>Pymatuning State Park – Tuttle Point</u>		
PWS Waters	<u>Pymatuning Reservoir</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u>3</u>

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Linesville Fish Culture Station				
<b>WQM Permit No.</b>		<b>Issuance Date</b>		
2089201		7/18/1990		
<b>Waste Type</b>	<b>Degree of Treatment</b>	<b>Process Type</b>	<b>Disinfection</b>	<b>Avg Annual Flow (MGD)</b>
Industrial	Settling			
<b>Hydraulic Capacity (MGD)</b>	<b>Organic Capacity (lbs/day)</b>	<b>Load Status</b>	<b>Biosolids Treatment</b>	<b>Biosolids Use/Disposal</b>
				Land application

Changes Since Last Permit Issuance:

Other Comments: Permit is for a pump station and two lined lagoons (A&B).

Modifications described in letters submitted 5/10/1991 and 4/29/2016 were incorporated into the existing permit.

**Compliance History**

**DMR Data for Outfall 001 (from December 1, 2017 to November 30, 2018)**

Parameter	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17
Flow (MGD) Average Monthly	0.1440	0.2160	0.2880	0.2592	0.2304	0.2016	0.1872	0.2520	1.4400	0.2160	0.2160	0.2880
CBOD5 (mg/L) Average Monthly	2	< 2	2	3	4	5	8	3	3	< 2	3	4
TSS (mg/L) Average Monthly	2	1	7	3	6	6	3	4	4	2	4	3

**DMR Data for Outfall 002 (from December 1, 2017 to November 30, 2018)**

Parameter	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17
Flow (MGD) Average Monthly	0.0749	0.0432	0.0288		0.0576	0.0432	0.2880					
CBOD5 (mg/L) Average Monthly	2	< 2	4		3	< 2	< 2					
TSS (mg/L) Average Monthly	5	5	18		10	0.7	2					

**DMR Data for Outfall 004 (from December 1, 2017 to November 30, 2018)**

Parameter	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17
Flow (MGD) Average Monthly				0.0288	0.0432	0.0374	0.0216	0.0144	0.0374			0.0374
CBOD5 (mg/L) Average Monthly				3	< 2	< 2	3	< 2	< 2			2
TSS (mg/L) Average Monthly				3	4	0.5	5	3	7			7

**DMR Data for Outfall 005 (from December 1, 2017 to November 30, 2018)**

Parameter	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17
Flow (MGD) Average Monthly	0.1440	0.2160	0.2880	0.2592	0.2304	0.2016	0.1872	0.2520	0.1440	0.2160	0.2160	0.2880
CBOD5 (mg/L) Average Monthly	2	3	5	5	4	2	2	< 2	< 2	4	< 2	< 2

**NPDES Permit Fact Sheet  
Linesville Fish Culture Station**

**NPDES Permit No. PA0044016**

TSS (mg/L) Average Monthly	3	8	8	15	4	2	3	4	0.5	2	< 1	1
-------------------------------	---	---	---	----	---	---	---	---	-----	---	-----	---

**DMR Data for Outfall 006 (from December 1, 2017 to November 30, 2018)**

Parameter	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17
Flow (MGD) Average Monthly			0.0058						0.0374			
CBOD5 (mg/L) Average Monthly			3						< 2			
TSS (mg/L) Average Monthly			8						14			

**DMR Data for Outfall 007 (from December 1, 2017 to November 30, 2018)**

Parameter	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17
Flow (MGD) Average Monthly			0.0086						0.0374			
CBOD5 (mg/L) Average Monthly			2						< 2			
TSS (mg/L) Average Monthly			6						14			

**DMR Data for Outfall 008 (from December 1, 2017 to November 30, 2018)**

Parameter	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17
Flow (MGD) Average Monthly			0.0058						0.0374			
CBOD5 (mg/L) Average Monthly			3						< 2			
TSS (mg/L) Average Monthly			2						14			

**DMR Data for Outfall 009 (from December 1, 2017 to November 30, 2018)**

Parameter	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17
Flow (MGD) Average Monthly			0.0086						0.0374			
CBOD5 (mg/L) Average Monthly			9						< 2			
TSS (mg/L) Average Monthly			12						14			

**DMR Data for Outfall 010 (from December 1, 2017 to November 30, 2018)**

Parameter	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17
Flow (MGD) Average Monthly	0.2880	0.2880	0.2880	0.2880	0.2880	0.2880	0.2880	0.2880	0.2074	0.1440	0.1382	0.2074
CBOD5 (mg/L) Average Monthly	< 2	< 2	< 2	3	2	3	3	3	3	< 2	< 2	3
TSS (mg/L) Average Monthly	5	1	1	1	1	5	3	2	2	5	24	20

**DMR Data for Outfall 011 (from December 1, 2017 to November 30, 2018)**

Parameter	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18	DEC-17
Flow (MGD) Average Monthly	0.8179	0.8179	0.8179	0.8179	0.8179	0.8179	0.8179	0.8179	1.0771	0.8640	0.8179	0.8179
CBOD5 (mg/L) Average Monthly	3	3	3	3	3	4	3	2	2	< 2	3	2
TSS (mg/L) Average Monthly	11	9	8	10	2	7	7	11	5	14	14	11

Compliance History	
<b>Summary of Inspections:</b>	No documented inspections in the last 5 years

Other Comments: Permittee notified the Department on 1/29/2015 of a TSS effluent violation (January 2015) at Outfall 010 due to large amount of geese that took up residence on this outfall's pond.

**Development of Effluent Limitations**

<b>Outfall No.</b> <u>001</u> <b>Latitude</b> <u>41° 38' 38.17"</u> <b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	<b>Design Flow (MGD)</b> <u>0.2039</u> <b>Longitude</b> <u>80° 25' 32.81"</u>
<b>Outfall No.</b> <u>005</u> <b>Latitude</b> <u>41° 38' 44.27"</u> <b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	<b>Design Flow (MGD)</b> <u>0.2021</u> <b>Longitude</b> <u>80° 25' 29.46"</u>
<b>Outfall No.</b> <u>010</u> <b>Latitude</b> <u>41° 38' 45.42"</u> <b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	<b>Design Flow (MGD)</b> <u>0.3312</u> <b>Longitude</b> <u>80° 25' 23.19"</u>
<b>Outfall No.</b> <u>011</u> <b>Latitude</b> <u>41° 38' 52.17"</u> <b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	<b>Design Flow (MGD)</b> <u>0.6504</u> <b>Longitude</b> <u>80° 25' 27.28"</u>

**Technology-Based Limitations**

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)

**Water Quality-Based Limitations**

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
N/A			

Comments: No water quality modeling was conducted due to these discharges being to a large reservoir.

**Best Professional Judgment (BPJ) Limitations**

Comments: In accordance with the Department’s SOP entitled “Establishing Effluent Limitations for Individual Industrial Permits,” effluent limits or monitoring requirements found in the PAG-11 NPDES General Permit pertaining to aquaculture facilities were incorporated into this permit. These parameters include BOD<sub>5</sub>, TSS, ammonia nitrogen, total nitrogen, total phosphorus and dissolved oxygen.

A BPJ determination was made by the Department to give dissolved oxygen an alternative limit than that found in the PAG-11 NPDES General permit (6.0 mg/l limit in PAG-11 Permit). A dissolved oxygen limit of a daily minimum of 5.0 mg/l will be placed in the permit due to the discharges being to a warm water fishery impoundment, where natural variations in oxygen level are to be expected.

Net limits for BOD<sub>5</sub>, TSS and total nitrogen from in the general permit were converted to effluent limits at these outfalls due to the source water not entirely coming from the same watercourse as the discharge was to (40 CFR § 122.45 (g)). Sampling from Intake 001 will be used to calculate net limits for the outfalls that have associated net limits (Outfalls 002, 003, 004, 006, 007, 008, and 009).

**Anti-Backsliding**

The effluent limits for CBOD<sub>5</sub> (BOD<sub>5</sub>) found in the previous permit are based on BPJ, and they will be retained in the proposed renewed permit due to anti-backsliding provisions. The CBOD<sub>5</sub> limits will be converted to BOD<sub>5</sub> limits to be consistent with other state fish hatchery permits recently issued in the Northwest Region and by also acknowledging that the concentration of CBOD<sub>5</sub> and BOD<sub>5</sub> should be practically the same at lower concentrations.

**Other Considerations**

Monitoring frequencies for flow, pH, D.O., BOD<sub>5</sub>, TSS, ammonia nitrogen, total nitrogen, and total phosphorus were set referencing the PAG-11 NPDES General Permit.

pH monitoring frequency will be set to "1/month" based on 5 years of DMR data demonstrating that they can consistently meet the limits. This action is consistent with permitting language found in the PAG-11 Permit boilerplate language, Part A.I.B.2.



**Development of Effluent Limitations**

<b>Outfall No.</b> <u>002</u>	<b>Design Flow (MGD)</b> <u>0.0458</u>
<b>Latitude</b> <u>41° 38' 31.23"</u>	<b>Longitude</b> <u>80° 25' 51.88"</u>
<b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	
<b>Outfall No.</b> <u>003</u>	<b>Design Flow (MGD)</b> <u>0.2074</u>
<b>Latitude</b> <u>41° 38' 45.53"</u>	<b>Longitude</b> <u>80° 25' 43.88"</u>
<b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	
<b>Outfall No.</b> <u>004</u>	<b>Design Flow (MGD)</b> <u>0.1494</u>
<b>Latitude</b> <u>41° 38' 57.51"</u>	<b>Longitude</b> <u>80° 25' 24.21"</u>
<b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	
<b>Outfall No.</b> <u>006</u>	<b>Design Flow (MGD)</b> <u>0.0535</u>
<b>Latitude</b> <u>41° 38' 42.08"</u>	<b>Longitude</b> <u>80° 25' 21.34"</u>
<b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	
<b>Outfall No.</b> <u>007</u>	<b>Design Flow (MGD)</b> <u>0.0481</u>
<b>Latitude</b> <u>41° 38' 43.15"</u>	<b>Longitude</b> <u>80° 25' 21.92"</u>
<b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	
<b>Outfall No.</b> <u>008</u>	<b>Design Flow (MGD)</b> <u>0.0481</u>
<b>Latitude</b> <u>41° 38' 44.08"</u>	<b>Longitude</b> <u>80° 25' 22.46"</u>
<b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	
<b>Outfall No.</b> <u>009</u>	<b>Design Flow (MGD)</b> <u>0.1732</u>
<b>Latitude</b> <u>41° 38' 44.5"</u>	<b>Longitude</b> <u>80° 25' 22.7"</u>
<b>Wastewater Description:</b> <u>Aquaculture Discharge</u>	

**Technology-Based Limitations**

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)

**Water Quality-Based Limitations**

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
N/A			

Comments: No water quality modeling was conducted due to these discharges being to a large reservoir.

**Best Professional Judgment (BPJ) Limitations**

Comments: In accordance with the Department’s SOP entitled “Establishing Effluent Limitations for Individual Industrial Permits,” effluent limits or monitoring requirements found in the PAG-11 NPDES General Permit pertaining to aquaculture facilities were incorporated into this permit. These parameters include BOD<sub>5</sub>, TSS, ammonia nitrogen, total nitrogen, total phosphorus and dissolved oxygen.

A BPJ determination was made by the Department to give dissolved oxygen an alternative limit than that found in the PAG-11 NPDES General permit (6.0 mg/l limit in PAG-11 Permit). A dissolved oxygen limit of a daily minimum of 5.0 mg/l will be placed in the permit due to the discharges being to a warm water fishery impoundment, where natural swings in oxygen level are to be expected.

### **Anti-Backsliding**

The effluent limits for CBOD<sub>5</sub> (BOD<sub>5</sub>) found in the previous permit are based on BPJ, and they will be retained in the proposed renewed permit due to anti-backsliding provisions. The CBOD<sub>5</sub> limits will be converted to BOD<sub>5</sub> limits to be consistent with other state fish hatchery permits recently issued in the Northwest Region and by also acknowledging that the concentration of CBOD<sub>5</sub> and BOD<sub>5</sub> should be practically the same at lower concentrations.

### **Other Considerations**

Monitoring frequencies for flow, pH, D.O., BOD<sub>5</sub>, TSS, ammonia nitrogen, total nitrogen, and total phosphorus were set referencing the PAG-11 NPDES General Permit.

pH monitoring frequency will be set to "1/month" based on 5 years of DMR data demonstrating that they can consistently meet the limits. This action is consistent with permitting language found in the PAG-11 Permit boilerplate language, Part A.I.B.2.

Since all the ponds that supply Outfalls 002 & 003 only contain fish for part of the year and those ponds are then drained, a footnote was added to the permit for those outfalls that reads "Sampling is not required during a sampling period where all the ponds that supply the outfall did not contain fish during that period, and the ponds were drained prior to that sampling period" for any discharge that may occur during that period due to rain and snow.

**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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5	XXX	XXX	XXX	10.0	10.0	20	1/quarter	8-Hr Composite
TSS	XXX	XXX	XXX	XXX	20.0	70	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	8-Hr Composite
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 001 (prior to mixing with any other waters)

Other Comments:

**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.

**Intake 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	Daily Maximum	Instant. Maximum		
BOD5 Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
TSS Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Nitrogen Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: Concrete basin at the main Lake Water Pumphouse

Other Comments:

**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 002, 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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5 Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
BOD5	XXX	XXX	XXX	10.0	Report	20	1/quarter	8-Hr Composite
TSS Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
TSS	XXX	XXX	XXX	30.0	Report	60	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 002 (prior to mixing with any other waters)

Other Comments:

**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 003, 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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5 Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
BOD5	XXX	XXX	XXX	10.0	Report	20	1/quarter	8-Hr Composite
TSS Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
TSS	XXX	XXX	XXX	30.0	Report	60	1/quarter	8-Hr Composite
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 003 (prior to mixing with any other waters)

Other Comments:

**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 004, 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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5 Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
BOD5	XXX	XXX	XXX	10.0	Report	20	1/quarter	8-Hr Composite
TSS Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
TSS	XXX	XXX	XXX	30.0	Report	60	1/quarter	8-Hr Composite
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 004 (prior to mixing with any other waters)

Other Comments:

**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 005, 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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5	XXX	XXX	XXX	10.0	10.0	20	1/quarter	8-Hr Composite
TSS	XXX	XXX	XXX	20.0	20.0	40	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	8-Hr Composite
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 005 (prior to mixing with any other waters)

Other Comments:



**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 006, 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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5	XXX	XXX	XXX	10.0	Report	20	1/quarter	8-Hr Composite
BOD5 Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
TSS Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
TSS	XXX	XXX	XXX	50.0	Report	100	1/quarter	8-Hr Composite
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 006 (prior to mixing with any other waters)

Other Comments:

**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 007, 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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5 Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
BOD5	XXX	XXX	XXX	14.0	Report	28	1/quarter	8-Hr Composite
TSS	XXX	XXX	XXX	50.0	Report	100	1/quarter	8-Hr Composite
TSS Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 007 (prior to mixing with any other waters)

Other Comments:

**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 008, 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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5 Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
BOD5	XXX	XXX	XXX	10.0	Report	20	1/quarter	8-Hr Composite
TSS Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
TSS	XXX	XXX	XXX	50.0	Report	100	1/quarter	8-Hr Composite
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 008 (prior to mixing with any other waters)

Other Comments:

**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 009, 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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5 Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
BOD5	XXX	XXX	XXX	10.0	Report	20	1/quarter	8-Hr Composite
TSS	XXX	XXX	XXX	30.0	Report	60	1/quarter	8-Hr Composite
TSS Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 009 (prior to mixing with any other waters)

Other Comments:

**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 010, 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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5	XXX	XXX	XXX	10.0	10.0	20	1/quarter	8-Hr Composite
TSS	XXX	XXX	XXX	XXX	20.0	100	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	8-Hr Composite
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 010 (prior to mixing with any other waters)

Other Comments:

**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 011, 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 Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/month	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/week	Grab
BOD5	XXX	XXX	XXX	10.0	10.0	20	1/quarter	8-Hr Composite
TSS	XXX	XXX	XXX	XXX	20.0	70	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	8-Hr Composite
Ammonia	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 011 (prior to mixing with any other waters)

Other Comments: