

NORTHWEST REGIONAL OFFICE CLEAN WATER PROGRAM

Application Type	Renewal
Facility Type	Industrial
Major / Minor	Minor

NPDES PERMIT FACT SHEET ADDENDUM

Application No.	PA0044016		
APS ID	962792		
Authorization ID	1210/12		

Applicant and Facility Information						
Applicant Name	PA Fish & Boat Commission Hatcheries Bureau	Facility Name	Linesville Fish Culture Station			
Applicant Address	Benner Spring Fish Research Station 1735 Shiloh Road	Facility Address	13300 Hartstown Road			
	State College, PA 16801-8495		Linesville, PA 16424-5434			
Applicant Contact	Mindy McClenahan	Facility Contact				
Applicant Phone	(814) 353-2229	Facility Phone				
Client ID	135455	Site ID	241007			
SIC Code	0921	Municipality	Pine Township			
Agriculture - Fish Hatcheries and SIC Description Preserves		County	Crawford			
Date Published in PA B	ulletin March 9, 2019	EPA Waived?	Yes			
Comment Period End D	Pate April 8, 2019	If No, Reason				
Purpose of Application Application Application for a renewal of an NPDES permit for discharge of treated industrial waste.						

Internal Review and Recommendations

The Department met with the numerous representatives of the Hatcheries Bureau on April 10, 2019, at the request of the permittee to discuss the many proposed changes on the draft NPDES Permit from the previous permit cycle. After the meeting, the permittee requested a 15-day public comment period extension to submit comments on the draft NPDES Permit, which was granted by the Department on March 28, 2019. The Permittee submitted comments on the draft NPDES Permit in a letter dated April 22, 2019 (See Attachment A). Below are their comments and the Department corresponding responses and actions as a result of those comments.

Comment 1) For Outfalls 002, 003, 004, 006, 007, 008, and 009, we recommend the Average Quarterly and Instantaneous Maximum effluent concentration limitations be removed from the permit for Biochemical Oxygen Demand (BOD5) and Total Suspended Solids (TSS). This recommendation is in line with anti-backsliding rules because the draft Daily Maximum limitations are more stringent than the Average Quarterly and Instantaneous Maximum limitations. Also, having only Daily Maximum limitations conforms with PAG-11 Fact Sheet ("The maximum daily limit, only, will be specified in the General Permit because the decision was made to have permittees monitor once per quarter through a grab sample, and an average monthly statistical value cannot be derived through sampling only once every three months.")

Response 1) With Daily Maximum net limits being proposed, and sampling only being required 1/quarter, placing an average statistical limit is inappropriate due to the inability to derive an average statistical value from one sample. Anti-degradation would not be applicable due to the proposed Daily Maximum limits being more stringent assuming that net limits could replace the existing Average Quarterly effluent limits for the BOD5 and TSS at those same outfalls where there is an existing limit under the same assumptions made in Response 3 below. The existing proposed Average Quarterly limits for BOD5 and TSS at Outfalls 002, 003, 004, 006, 007, 008, and 009 will be removed in the redrafted permit.

Approve	Return	Deny	Signatures	Date
V				
Х			Adam J. Pesek, E.I.T. / Environmental Engineering Specialist	
V				
X			Justin C. Dickey, P.E. / Environmental Engineer Manager	
V			-	
Х			John A. Holden, P.E. / Program Manager	

Internal Review and Recommendations

An Instantaneous Maximum limit is statistically different than a Daily Maximum limit. An Instantaneous Maximum limit is a concentration that is "never to be exceeded" or averaged over a short period of time rather than an average of all observations made within a 24-hour period (the maximum daily limit). Additionally, the instantaneous maximum limits for BOD and TSS are for the Department's use only and will not be reported on DMRs due to the minimal sampling frequency in this situation. Therefore, it is not necessary to remove the existing Instantaneous Maximum limits for BOD5 and TSS at Outfalls 002, 003, 004, 006, 007, 008, and 009 because they are being used for the Department's use only in determining compliance with the permit. The instantaneous maximum limits for BOD5 and TSS will remain at these outfalls.

Comment 2) We recommend for Outfalls 002, 003, 004, 006, 007, 008, and 009 that the required sample type of 8-Hr Composite for BOD5, TSS, Total Nitrogen (Total N), Ammonia-Nitrogen (NH3) and Total Phosphorus (Total P) be changed to Grab samples. Grab samples are also recommended in the PAG-11 Fact Sheet. Changing from 8-Hr composite to Grab samples would save countless staff hours when sampling is required at all 22 outfalls.

Response 2) The Department concurs with this comment. Sample types will be changed from "8-Hr Composite" to "Grab" for BOD5, TSS, Total N, NH3, and Total P at Outfalls 002, 003, 004, 006, 007, 008, and 009.

Comment 3) For Outfalls 001, 005, 010, and 011, we are requesting the waiver in 40 CFR 122.45(g)(4) ("Credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made. The Director may waive this requirement if he finds that no environmental degradation will result.") to allow these Outfalls (to have) net limitations for BOD5, TSS and Total N. These Outfalls allow for a mixture of intake water (Pymatuning Sanctuary) and well water to be used and discharged at each Outfall. Well water is often used to improve the water quality for health of the fish and eggs being raised in the facility.

Response 3) 40 CFR 122.45(g) allows, upon request of the discharger, technology-based effluent limitations or standards to be adjusted to reflected credit for pollutants in the discharger's intake water if all the following conditions are met:

- (1) The discharger demonstrates that the control system it proposes or uses to meet applicable technology-based limits (from 40 CFR Subchapter N Effluent Guidelines and Standards) would, if properly installed and operated, meet the limitations and standards in the absence of pollutants in the intake waters.
- (2) Credit for generic pollutants such as BOD and TSS is not granted unless the permittee demonstrates that the constituents of the generic measure in the effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere.
- (3) Credit shall be granted only to the extent necessary to meet the applicable limitation or standard, up to a maximum value equal to the influent value.
- (4) Credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made. The Director (PADEP) may waive this requirement if he finds that no environmental degradation will result.

Although 40 CFR 122.45(g) is applicable for federal Effluent Limitation Guidelines (ELGs), the same conditions in the federal regulations described above were used to evaluate the appropriateness of applying net limits for BOD5, TSS and Total N at Outfalls 001, 005, 010, and 011, due to the proposed limits currently being Best Professional Judgement (BPJ) based. The Department agrees that net limits can be applied for these pollutants at these outfalls based on the following assumptions:

- 1) Based on current eDMR effluent data for CBOD5 and TSS at these outfalls, the outfalls are able to meet the effluent limits, even with the inclusion of pollutants from the intake water.
- 2) The constituents of BOD, TSS, and Total N are believed to be the same in the effluent as are found in the intake because they both involve fish habitat.
- 3) In calculating the net limit, the concentration of the intake water will be subtracted from the effluent concentrations only.
- 4) The discharges are to the same body of water as the raw water intake with exception of additional well water that is used. No environmental degradation is suspected due to the well water due to it being of higher quality than the reservoir water and the discharges being to a large reservoir where significant dilution is available.

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Daily Maximum net limits from the Department's PAG-11 General Permit for BOD5, TSS, and Total N will replace the existing proposed daily maximum effluent limits in the permit at Outfall 001, 005, 010, and 011. A monitoring requirement of 1/quarter for these parameters at the effluent will be placed in the permit also in order to calculate the effluent net value.

Comment 4) With the above waiver in place, we also recommend that Outfalls 001, 005, 010 and 011 have no average Quarterly or Instantaneous Maximum effluent concentration limits for BOD5 and TSS. This recommendation is in line with anti-backsliding rules because the draft Daily Maximum limitations are more stringent than the Average Quarterly and Instantaneous Maximum limitations. Also, having only Daily Maximum limitations is what is outlined in the PAG-11 Fact Sheet. "The maximum daily limit, only, will be specified in the General Permit because the decision was made to have permittees monitor once per quarter through a grab sample, and an average monthly statistical value cannot be derived through sampling only once every three months."

Response 4) With Daily Maximum net limits being proposed as discussed in Response 3 above, and sampling only being required 1/quarter, placing an average statistical limit is inappropriate due to the inability to derive an average statistical value from one sample. Anti-degradation would not be applicable due to the proposed Daily Maximum limits being more stringent assuming that net limits could replace the existing Average Quarterly effluent limits for the BOD5 and TSS at those same outfalls where there is an existing limit under the same assumptions made in Response 3 above. The existing proposed Average Quarterly limits for BOD5 and TSS at Outfalls 001, 005, 010, and 011 will be removed in the redrafted permit.

An Instantaneous Maximum limit is statistically different than a Daily Maximum limit. An Instantaneous Maximum limit is a concentration that is "never to be exceeded" or averaged over a short period of time rather than an average of all observations made within a 24-hour period (the Maximum Daily limit). Additionally, the Instantaneous Maximum limits for BOD and TSS are for the Department's use only and will not be reported on DMRs due to the minimal sampling frequency in this situation. Therefore, it is not necessary to remove the existing Instantaneous Maximum limits for BOD5 and TSS at Outfalls 001, 005, 010, and 011 because they are being used for the Department's use only in determining compliance with the permit. The Instantaneous Maximum limits for BOD5 and TSS will remain at these outfalls.

Comment 5) We also recommend for Outfalls 001, 005, 010 and 011 that the required sample type of 8-Hr Composite for BOD5, TSS, Total N and NH3 be changed to Grab samples. Grab samples are also recommended in the PAG-11 Fact Sheet. Changing from 8-Hr composite to Grab samples would save countless staff hours when sampling is required at all eleven (11) Outfalls.

Response 5) The Department concurs with this comment. Sample types will be changed from "8-Hr Composite" to "Grab" for BOD5, TSS, Total N and NH3.

Comment 6) We recommend the footnote in the draft permit associated with Outfalls 002 & 003 be simplified from "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" to the footnote that is in the current permit that reads "Sampling is only required when the ponds associated with this outfall are being used for fish production." We also recommend Outfall 004 be associated with this footnote, as it is in the current permit, since its usage has not changed and will not be changing over the next 5 years. The final footnote should apply to Outfalls 002, 003, and 004.

Response 6) The Department partially concurs with this comment. While the Department is in agreement with arguments made during the April 10, 2019, meeting between the Department and representatives of the PAFBC's Hatcheries Bureau regarding the draining the ponds being unnecessary and burdensome to discontinue sampling due to the fish management practices in the ponds in question, the Department insists that the requirement to sample at the outfalls if any of the ponds associated with the outfall are used for fish production during the monitoring period be required. The Department proposes placing the following footnote in the permit for Outfalls 002, 003, and 004: "Sampling is only required when the ponds associated with this outfall are being used for fish production during the monitoring period."

Comment 7) We recommend all Outfalls (001, 002, 003, 004, 005, 006, 007, 008, 009, 010, and 011) have a "Report" only Daily Minimum for Dissolved Oxygen. At certain times of the year, when the intake water Dissolved Oxygen Levels are 2 or 3 mg/L, these levels could greatly impact our Dissolved Oxygen levels at some of our discharges that do not have lengthy retention times between intake and Outfall. The "report only" monitoring would allow for the collection of data over the next five years so that an appropriate minimum concentration limit can be set for future permits.

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Response 7) As stated in the "Fact Sheet," the dissolved oxygen limits are Best Professional Judgement (BPJ)-based on water quality criteria in 25 Pa Code 93.7 for a warm water impoundment. The Department is willing to allow the permittee to monitor for dissolved oxygen at these outfalls over the next permit cycle (5 years) to collect data to determine the appropriate next course of action to take, with an expectation that a limitation will be imposed in the next permit cycle. Due to the previously proposed limit being BPJ-based, there is no regulatory deadline for imposing it or a necessity for a compliance schedule with interim requirements in the permit. The dissolved oxygen limit at all outfalls will be removed from the permit and replaced with a monitoring requirement.

No other comments were received on the draft permit during the draft comment period.

The permit is being redrafted due to the numerous changes being proposed to the permit as a result of the above comments.

There are currently no open violations listed in EFACTS for this permittee (12/23/2019).

Fact Sheet Addendum Attachment A



Figure 1 - Permittee Comment Letter