NORTHCENTRAL REGIONAL OFFICE
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0040835**
Facility Type	**Industrial**	APS ID	**985954**
Major / Minor	**Minor**	Authorization ID	**1260753**

NPDES PERMIT FACT SHEET ADDENDUM

Applicant and Facility Information

Applicant Name	**PA Fish & Boat Commission**	Facility Name	**Bellefonte State Fish Hatchery**
Applicant Address	1735 Shiloh Road	Facility Address	1115 Spring Creek Road
	State College, PA 16801-8400		Bellefonte, PA 16823-8458
Applicant Contact	Mindy Mcclenahan	Facility Contact	John Watson
Applicant Phone	(814) 353-2229	Facility Phone	1-814-355-3371
Client ID	135455	Site ID	258872
SIC Code	0273	Municipality	Benner Township
SIC Description	Agriculture - Aniimal Aquaculture	County	Centre
Date Published in PA Bulletin	March 7, 2020	EPA Waived?	Yes
Comment Period End Date	April 21, 2020 (15 day extension request granted)	If No, Reason	
Purpose of Application	Application for a renewal of an NPDES permit for discharge of treated Industrial		

The Department received comments on the draft permit from the permittee, the University Area Joint Authority (UAJA), the US Environmental Protection Agency (EPA), and internal DEP comments. The comments are attached to this fact sheet addendum. The comments will result in revisions to the draft permit that will require a second draft permit cycle. This fact sheet addendum will only directly address the comments that resulted in revisions to the original draft permit. A full comment and response document addressing all comments will be prepared for the final issuance of the permit.

Revisions due to comments made by UAJA, EPA, and DEP staff:

Summary of Comment: Monitoring for nutrients (total phosphorus and total nitrogen) were not included in the draft permit.

Response: This was an error. The Department will include nutrient monitoring of total phosphorus and total nitrogen in accordance with the Department's Chesapeake Bay Watershed Implementation Plan (WIP) II. In accordance with the respective WIP II, monitoring and reporting for total phosphorus and total nitrogen will be required on a quarterly basis.

Revisions due to comments made by PFBC:

Summary of Comment: The permittee requests the existing monitoring frequency for total suspended solids (TSS), $CBOD_5$, and ammonia remain 1/week. The permittee's basis for this request is that the past 26 years' worth of sampling data has not shown much variability in results. The permittee states that "The current sampling frequencies encompass normal, daily operations at the hatchery and represent normal operations on a daily, weekly and seasonal basis. Increasing the sampling frequency would not be beneficial or provide any new or different data, just more of the same data." The draft permit proposed increasing the monitoring of the respective parameters to 2/week with a special condition that requires sampling events to be at least 48 hours apart from each other.

Approve	Return	Deny	Signatures	Date
X			*Chad A. Fabian* Chad A. Fabian / Project Manager	June 23, 2020
X			*Nicholas W. Hartranft, P.E.* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	June 24, 2020
X			*Thomas M. Randis* Thomas M. Randis / Program Manager	June 24, 2020

Response: The Department will honor the request to keep TSS sampling at 1/week. However, the Department believes 2/week sampling for Ammonia and $CBOD_5$ is warranted to better characterize the ammonia concentrations and potential organic enrichment content as it relates to $CBOD_5$ of the effluent and its relationship with Spring Creek being on the *List 4b of the 2008 Pennsylvania Integrated Water Quality Monitoring and Assessment Report*.

Summary of Comment: The permittee requests the removal of Total Organic Carbon (TOC) based on previous sampling results during prior permit cycles, citing a 10/29/2007 DEP correspondence letter in which the Department states that TOC and Particulate Organic Carbon (POC) results yielded little value.

Response: The Department will honor the permittee's request and remove all TOC monitoring from the permit based on previous Department decisions.

Summary of Comment: The permittee states that the "proposed 10% reduction is not explained well and appears to be arbitrary and capricious in the manner it was chosen, especially in light of several recent years of IBI scores above the impairment threshold and a trend in improved scores since 2012."

Response: The proposed 10% reduction will be removed in the new draft permit after reconsidering recent Spring Creek assessment data trends provided by the PFBC in a May 7, 2020 letter. The allowable annual loading for TSS will remain 49,430 pounds as it is in the existing permit.

Summary of Comment: The draft permit proposed annual TSS loading be reported on an annual basis instead of the existing production year (May through April).

Response: The Department will honor the permittees request. The proposed change was to accommodate the Department's eDMR program. However, the permit will indicate the TSS annual load limitation is based on a fish production year of May through April. The permit will include a condition stating that the load shall be reported with the April DMR results.

Summary of Comment: The permittee believes a hydrogen peroxide usage rate limit is not warranted based on the Safety Data Sheet (SDS) information stating that 99% is biodegraded within 30 minutes.

Response: The Department agrees that 99% biodegradation of hydrogen peroxide will occur within 30 minutes prior to being discharged. The previous chemical calculations in the original fact sheet assumed 100% pass through of the chemical. This allowed 4.4 pounds per day of hydrogen peroxide to be used/discharged. Assuming 99% biodegradation throughout the facility, the new usage limitation for hydrogen peroxide is 440 pounds per day (approximately 50.5 gallons per day). This new usage rate will be implemented in the second draft permit.

Summary of Comment: The permittee requests formalin usage rates be omitted since the permit already contains an effluent limit for formaldehyde.

Response: The Department agrees that the effluent limit for formaldehyde is adequate to monitor the safe usage of formalin, which is a formaldehyde solution. Therefore, the formalin usage rate will be removed from the permit.

Summary of Comment: The permittee requests that the Department approve the 25 lbs/day usage rate for Chloramine-T that was proposed in the NPDES renewal application. The permittee cites an April 2007 Environmental Assessment (EA) study completed by the United States Geological Survey (USGS) and the U.S. Food and Drug Administration's FINDING OF NO SIGNIFICANT IMPACT (FONSI) dated 2/13/2014.

Response: The Department has reviewed the above EA and FONSI regarding Chloramine-T usage in hatcheries. In summary, the study states that the acute aquatic life effect level (ALEL) are most critical and applicable. Therefore, the Department has re-evaluated the chemical usage rate based only on the acute ALEL. Please see attached PenntoxSD output using only the acute ALEL. The new water quality based effluent limitation (WQBEL) is 0.735 mg/l. Using the calculation method provided in the original fact sheet, Chloramine-T allowable daily usage rate is 44 pounds.

The next draft permit will contain the permittee's proposed maximum usage rate of 25 lbs/day.

Proposed Effluent Limits and Monitoring Frequencies in 1st draft permit:

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/day	Grab
Temperature (ºF)	XXX	XXX	XXX	Report Daily Max	XXX	XXX	Continuous	I-S
CBOD5	300	600	XXX	5.0	10.0	12.5	2/week	24-Hr Composite
TSS	270	540	XXX	4.5	9.0	11.2	2/week	24-Hr Composite
Total Suspended Solids (Total Load, lbs) (lbs)	XXX	44,490 Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Ammonia	60	120	XXX	1.0	2.0	2.5	2/week	24-Hr Composite
Dissolved Phosphorus	18	36	XXX	0.3	0.6	0.75	1/week	24-Hr Composite
Formaldehyde	60	120	XXX	1.0	2.0	2.5	1/week	3 Grabs/24 Hours
TOC	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	24-Hr Composite
TOC (Raw Influent)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	24-Hr Composite

Proposed Effluent Limits and Monitoring Frequencies in 2nd draft permit:

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/day	Grab
Temperature (deg F) (ºF)	XXX	XXX	XXX	Report Daily Max	XXX	XXX	Continuous	I-S
Carbonaceous Biochemical Oxygen Demand (CBOD5) (4)	300	600	XXX	5.0	10.0	12.5	2/week	24-Hr Composite
Total Suspended Solids (4)	270	540	XXX	4.5	9.0	11.2	1/week	24-Hr Composite
Total Suspended Solids (Total Load, lbs) (lbs) (5)	XXX	49,430 Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Ammonia-Nitrogen (4)	60	120	XXX	1.0	2.0	2.5	2/week	24-Hr Composite
Phosphorus, Dissolved	18	36	XXX	0.3	0.6	0.75	1/week	24-Hr Composite
Formaldehyde (3)	60	120	XXX	1.0	2.0	2.5	1/week	3 Grabs/24 Hours
Total Nitrogen	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/quarter	8-Hr Composite

It is recommended that the permit be drafted again with the above proposed changes.