Pennsylvania Department of Environmental Protection

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0044032**
Facility Type	**Industrial**	APS ID	**966759**
Major / Minor	**Minor**	Authorization ID	**1226146**

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

Applicant and Facility Information

Applicant Name	**Pennsylvania Fish and Boat Commission**	Facility Name	**Upper Spring Creek State Fish Hatchery**
Applicant Address	1735 Shiloh Road	Facility Address	Spring Creek Road
	State College, PA 16801-8400		Bellefonte, PA 16823
Applicant Contact	Mindy McClenahan	Facility Contact	Mindy McClenahan
Applicant Phone	(814) 353-2229	Facility Phone	(814) 353-2229
Client ID	135455	Site ID	255305
SIC Code	0921	Municipality	Benner Township
SIC Description	Agriculture - Fish Hatcheries and Preserves	County	Centre
Date Application Received	April 23, 2018	EPA Waived?	Yes
Date Application Accepted	April 23, 2018	If No, Reason	
Purpose of Application	Renewal of existing NPDES permit		

Summary of Review

The PFBC has submitted an NPDES renewal application for the existing discharges (001-003) at the Upper Spring Creek State Fish Hatchery. The Upper Spring Creek State Fish Hatchery is a cool water/warmwater fish hatchery that propagates walleye and American shad in three 0.45-acre earthen ponds. The hatchery operations associated with this facility are seasonal. The hatchery discharges are intermittent and usually occur from April to November. Outfall 001 and 002 have not discharged since 2011. Outfall 003 has not discharged since 2013. Even though the hatchery has not operated in since 2013, the PFBC still wishes to be capable of discharging from these Outfalls should it find the need to operate these hatchery ponds.

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	Deny	Signatures	Date
X		*Chad A. Fabian* Chad A. Fabian / Project Manager	June 11, 2025
X		*Thomas M. Randis* for Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	June 12, 2025

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.064
Latitude	40° 52’ 28.71”	Longitude	77° 47’ 49.36”
Quad Name	State College	Quad Code	1223
Wastewater Description:	Effluent from hatchery propagation ponds		
Receiving Waters	Spring Creek	Stream Code	22966
NHD Com ID	67179390	RMI	7.9
Drainage Area	83 miles^2	Yield (cfs/mi^2)	0.22
Q_{7-10} Flow (cfs)	18.5	Q_{7-10} Basis	See below
Elevation (ft)	860	Slope (ft/ft)	0.017
Watershed No.	9-C	Chapter 93 Class.	HQ-CWF
Existing Use	HQ-CWF	Existing Use Qualifier	
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Various reaches are impaired, but not from this point source (See other comments below)		
Cause(s) of Impairment	Organic Enrichment/Low D.O.		
Source(s) of Impairment	Industrial Point Source		
TMDL Status	Pending		
Nearest Downstream Public Water Supply Intake	85 miles downstream near Milton, PA on the W. Br. Susquehanna River		

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	002	Design Flow (MGD)	0.18
Latitude	40° 52’ 19.34”	Longitude	77° 47’ 59.94”
Quad Name	State College	Quad Code	1223
Wastewater Description:	Effluent from hatchery propagation ponds		
Receiving Waters	Spring Creek	Stream Code	22966
NHD Com ID	67179390	RMI	7.9
Drainage Area	83 mi ^2	Yield (cfs/mi^2)	0.22
Q_{7-10} Flow (cfs)	18.5	Q_{7-10} Basis	Same as above
Elevation (ft)	860	Slope (ft/ft)	0.017
Watershed No.	9-C	Chapter 93 Class.	HQ-CWF
Existing Use	HQ-CWF	Existing Use Qualifier	
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Various reaches are impaired, but not from this point source (See other comments below)		
Cause(s) of Impairment	Organic Enrichment/Low D.O.		
Source(s) of Impairment	Industrial Point Source		
TMDL Status	Pending	Name	n/a
Nearest Downstream Public Water Supply Intake	Same as above		

Changes Since Last Permit Issuance: None

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	003	Design Flow (MGD)	0.576
Latitude	40° 52’ 27.93”	Longitude	77° 47’ 56.43”
Quad Name	State College	Quad Code	1223
Wastewater Description:	Effluent from hatchery propagation pond		
Receiving Waters	Spring Creek	Stream Code	22966
NHD Com ID	67179390	RMI	7.9
Drainage Area	83 mi^3	Yield (cfs/mi^2)	0.22
Q_{7-10} Flow (cfs)	18.5	Q_{7-10} Basis	Same as above
Elevation (ft)	860	Slope (ft/ft)	0.017
Watershed No.	9-C	Chapter 93 Class.	HQ-CWF
Existing Use	HQ-CWF	Existing Use Qualifier	
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Various reaches are impaired, but not from this point source (See other comments below)		
Cause(s) of Impairment	Organic Enrichment/Low D.O.		
Source(s) of Impairment	Industrial Point Source		
TMDL Status	Pending	Name	
Nearest Downstream Public Water Supply Intake	Same as above		

Changes Since Last Permit Issuance: None

The $Q_{7,10}$ of the receiving stream, Spring Creek, is the same as last issuance. It was previously determined by using the USGS gaging station downstream of the hatchery located just below the Bellefonte State Fish Hatchery. The spring flows used for the Bellefonte Hatchery were subtracted out of the gage data to achieve the above $Q_{7,10}$. See attached gage data from USGS website. It is the same $Q_{7,10}$ as last issuance.

There are several reaches of Spring Creek that are listed as impaired for organic enrichment/low dissolved oxygen from industrial point sources (other PFBC hatcheries). However, based on the Department’s aquatic studies, the receiving stream appears to recover just above the Upper Spring Creek Hatchery and is thriving just below the hatchery. Therefore, as in the past, the Upper Spring Creek Hatchery does not appear to be impacting the receiving stream.

Compliance History	
Summary of DMRs:	The facility has not discharged or operated in several years, as noted earlier in the report.
Summary of Inspections:	The most recent inspection uploaded into WMS was performed on 4/18/2023. No violations were found. No discharge was occurring during the inspection. The inspection notes that it has been several years since the hatchery has been operated or there has been a discharge.

Determination of Effluent Limitations

In accordance with the Department's applicable Standard Operating Procedure (SOP-New and Reissuance Individual IW NPDES Permits-Revised August 15, 2013), no water quality monitoring was performed on the outfalls since there are no changes to the effluent characteristics and the receiving stream. The existing CBOD5, TSS, dissolved P, and NH3-N were all technology based effluent standards. CBOD5 effluent limitations will be converted to BOD5, to remain consistent with other hatcheries and the Department's PAG-011 for Aquaculture facilities. Similarly, to remain consistent with other hatcheries and the PAG011, effluent net limitations for TSS and BOD5 have been implemented.

In accordance with Table 6-5 of the "Department's Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (Document No. 362-0400-001)" the Instantaneous Maximum (IMAX) limits were determined using a multiplier of 2.0 for TSS and BOD5 and 2.5 for non-conventional pollutants as per the previously mentioned guidance.

Best Professional Judgement

Monitor and report for temperature has been added since they facility operates warm water ponds within waters classified by the Department's Chapter 93 Regulations as cold-water fishes-migratory fishes (CWF-MF). Sample types are derived from the respective guidance and the frequencies are Best Professional Judgement (BPJ) based on the seasonal and intermittent hatchery operations.

Chesapeake Bay Requirements

It should also be noted that the facility is classified as a non-significant Chesapeake Bay contributor since they discharge less than 75 pounds per day of total nitrogen and less than 25 pounds per day of total phosphorus. Therefore, no nutrient monitoring will be required.

Chemical Additives

When in operation, the facility introduces 3 chemicals into the pond: Aquashade, Nitan, and phosphoric acid. These are not technically considered chemical additives, as they are herbicides used in typical pond treatments similarly to the chemicals covered under the Department's 91.38 permits.

Aquashade is used for algae reduction. PFBC proposes to use 0.25 gal/day, which is within the recommended range on the Aquashade label. Therefore, no effluent limitation will be implemented. Nitan, is a liquid fertilizer that has a main ingredient of ammonium nitrate. Since the facility already has an ammonia-nitrate effluent limitation, no maximum usage rate is necessary. Phosphoric Acid is also used as a fertilizer within the ponds. Since the facility already has dissolved phosphorus and pH effluent limitations, no maximum usage rate is necessary.

A summary of the proposed effluent limitations can be found in the below tables.

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent limits for **Discharge 001**, based on a **design flow** of **0.064 MGD**, are:

Parameter	Mass (lb/day)		Concentration (mg/l)		Instantaneous Maximum mg/l	Monitoring Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily			
Flow (MGD)	Report	Report				2/month	Weir
pH (S.U.)	Within range 6.0 to 9.0					1/month	Grab
D.O.			Report	Report		2/month	Grab
BOD_5	Report	Report	Report	Report		2/month	8 hr comp
TSS	Report	Report	Report	Report		2/month	8 hr comp
Dissolved P	0.2	0.4	0.3	0.6	0.75	2/month	8 hr comp
NH3-N	0.5	1.0	1.0	2.0	2.5	2/month	8 hr comp
TSS Effluent Net	8.0	16.0	15.0	30.0	30.0	2/month	8 hr comp
BOD_5 Effluent net	2.7	5.4	5.0	10.0	10.0	2/month	8 hr comp

The proposed effluent limits for **Discharge 002**, based on a **design flow** of **0.180 MGD**, are:

Parameter	Mass (lb/day)		Concentration (mg/l)		Instantaneous Maximum mg/l	Monitoring Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily			
Flow (MGD)	Report	Report				2/month	Weir
pH (S.U.)	Within range 6.0 to 9.0					1/month	Grab
D.O.			Report Daily Minimum			2/month	Grab
BOD_5	7.5	15	5.0	10.0	12.5	2/month	8 hr comp
TSS	23	46	15.0	30.0	37.5	2/month	8 hr comp
Dissolved P	0.5	1.0	0.3	0.6	0.75	2/month	8 hr comp
NH3-N	1.5	3.0	1.0	2.0	2.5	2/month	8 hr comp
TSS Effluent Net	23	46	15.0	30.0	30.0	2/month	8 hr comp
BOD_5 Effluent net	7.5	15	5.0	10.0	10.0	2/month	8 hr comp

The proposed effluent limits for **Discharge 003**, based on a **design flow** of **0.576 MGD**, are:

Parameter	Mass (lb/day)		Concentration (mg/l)		Instantaneous Maximum mg/l	Monitoring Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily			
Flow (MGD)	Report	Report				2/month	Weir
pH (S.U.)	Within range 6.0 to 9.0					1/month	Grab
D.O.			Report Daily Minimum			2/month	Grab
BOD_5						2/month	8 hr comp
TSS						2/month	8 hr comp
Dissolved P	1.4	2.8	0.3	0.6	0.75	2/month	8 hr comp
NH3-N	4.8	9.6	1.0	2.0	2.5	2/month	8 hr comp
TSS Effluent Net	72	144	15.0	30.0	30.0	2/month	8 hr comp
BOD_5 Effluent net	24	48	5.0	10.0	10.0	2/month	8 hr comp

Compliance History

A WMS query shows there are not any open violations.

Recommendation

It is recommended the permit be drafted as described above.