pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0044024**
Facility Type	**Industrial**	APS ID	**724950**
Major / Minor	**Minor**	Authorization ID	**1235818**

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

Applicant and Facility Information

Applicant Name	**PA Fish and Boat Commission**	Facility Name	**Pleasant Mount State Fish Hatchery**
Applicant Address	1735 Shiloh Road	Facility Address	229 Great Bend Turnpike
	State College, PA 16801		Pleasant Mount, PA 18453
Applicant Contact	Mindy McClenahan	Facility Contact	Zane Brower
Applicant Phone	(814) 353-2229	Facility Phone	(570) 448-2101
Client ID	135455	Site ID	250988
SIC Code	0921	Municipality	Mount Pleasant Township
SIC Description	Agriculture - Fish Hatcheries And Preserves	County	Wayne
Date Application Received	July 3, 2018	EPA Waived?	Yes
Date Application Accepted	July 3, 2018	If No, Reason	-

Purpose of Application: Renewal of NPDES permit.

Summary of Review

The applicant is requesting renewal of an NPDES permit to discharge treated wastewater from a concentrated aquatic animal production facility to West Branch Lackawaxen River (stream code 6066), a HQ-CWF/MF designated receiving stream in state water plan basin 01-B (Lackawaxen River). As per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than its designated use.

This facility is considered a flow-through fish hatchery since the hatchery source water is taken directly from West Branch Lackawaxen River. Three on-site wells can provide up to 250 gpm of flow to the facility, if needed. The facility is not subject to the requirements under 40 CFR Part 451 since the facility produces less than 20,000 lbs of aquatic animals per year.

The hatchery propagates brook trout, brown trout, lake trout, rainbow trout, golden rainbow trout, fathead minnows, golden shiners, walleyes, tiger muskellunge, purebred muskellunge, channel catfish, striped bass, striped bass hybrids, chain pickerel, largemouth bass, smallmouth bass, crappies, bluegill, brown bullheads, common suckers, grass carp, pumpkin seed, rock bass and yellow perch. Trout are raised from eggs to fingerlings or adults, fed a dry pellet diet and stocked in the spring. The cold-water fish are usually raised from eggs to fingerling size, fed forage fish or dry pellet feed and stocked in the fall.

Each raceway at the facility has 1 quiescent zone at the end to collect solids. The quiescent zones are piped to a clarifier and the over topping water from the clarifier flows into the settling pond before being discharged. When the clarifier is cleaned, solids are distributed to a series of concrete drying beds. Periodically, the drying beds are emptied with an excavator and the compost is trucked to fields for land application.

Water quality modeling in the previous permit assumed a long-term average flow of 1.3 MGD. Average flow discharged from the facility since the beginning of the previous permit term (April 1, 2014) was 1.56 MGD, showing a 20% increase. Q_{7-10} flows through the nearest downstream stream gage 01428750 (West Branch Lackawaxen River near Aldenville, PA) have

Approve	Deny	Signatures	Date
X		/s/ Brian Burden, E.I.T. / Project Manager	February 26, 2020
X		/s/ Amy M. Bellanca, P.E. / Environmental Engineer Manager	February 26, 2020

Summary of Review

increased by approximately 27% when comparing the most recent 15-year period to the previous 15-year period (see Watershed Information attachment). Production numbers provided in the permit application show that production varies throughout the years. The production numbers do not correlate with the upward trend in flows through both the West Branch Lackawaxen River and the effluent flows from the hatchery.

For this renewal, the limitations and monitoring requirements are carried over from the previous permit. These requirements are consistent with the requirements found in DEP's PAG-11 General Permit for discharges from aquatic animal production facilities. The discharge was not modeled with WQM 7.0 during this permit renewal for several reasons:

- Since this is a flow-through facility, too many assumptions are needed to estimate the Q_{7-10} for this segment of West Branch Lackawaxen River. There is a downstream stream gage approximately 7 ¾ miles downstream from the discharge to obtain data from, but the flows experienced at that gage are only representative of that location and not of the discharge location. Flows from the river are split between the hatchery and the natural river channel and combined again at the outfalls. How the flows are split can vary from day-to-day since they are controlled by the hatchery operators.

- To provide adequate flow to the hatchery while protecting the natural segment of West Branch Lackawaxen River between the hatchery intake and the outfalls, the operators can control water releases from Belmont Lake. Belmont Lake is located approximately 2 ½ miles upstream of the hatchery. Those release rates vary and contribute to the uncertainty of low flow values at the discharge location. The permit fact sheet from the previous renewal states that PF&B maintained a minimum dam discharge rate of 1.215 MGD over a 4-year period prior to 2011. The current facility operator indicated that there is no current minimum dam discharge rate.

- DMR results show that net BOD_5 concentrations discharged from the hatchery treatment system are consistently non-detect. The average quarterly net contributions of Total Suspended Solids over the past 2 years was 1.0 mg/L. The highest reported Ammonia-Nitrogen concentration discharged from the treatment system over the past 2 years was 0.128 mg/L. Dissolved oxygen discharge concentrations are consistently above the permitted 7.0 mg/L minimum (which is more stringent than the PAG-11 dissolved oxygen minimum of 6.0 mg/L).

There are no documented negative impacts from the hatchery on West Branch Lackawaxen River. The latest Integrated Water Quality Report lists no impairments for the river.

Note that Outfall 002 did not discharge during the previous permit cycle. Outfall 002 is only used when Pond 12 is in use either for additional settling or production. When this occurs, a portion of the discharge from Outfall 001 is sent into Pond 12 and ultimately discharged through Outfall 002. The Outfall 002 DMRs will note a requirement to identify the combined site discharge during days both outfalls are discharging.

The following list summarizes DMR exceedances over the past 2 years:

- August 2019: Dissolved Oxygen – 6.9 mg/L (minimum was 7.0 mg/L)
- June 2019: pH – 9.4 S.U. (maximum was 9.0 S.U.)

The previous permit included a Part C condition requiring the permittee to clean the concrete clarifier every 60 days (see Part C.I.F. of previous permit). This requirement is replaced by requirements found in the standard template permit condition titled "BMP Plan and Minimum Required BMPs for Aquaculture". This new condition requires the permittee to "identify and implement procedures for routine cleaning of rearing units and off-line settling basins". The permittee provided a revised BMP Plan (last updated January 17, 2020) that states: "The clarifier is generally cleaned monthly, but never greater than every sixty days from May to October. During the months of November through April, the clarifier is cleaned on an as needed basis should the hatchery exceed 1,000 pound of feed fed during any individual month."

The standard template Part C condition titled "Drug and Chemical Usage for Aquaculture Facilities" is also included in the permit. The maximum usage rate for Florfenicol identified in the permit application is under the maximum usage rate recommended for the facility in the December 13, 2010 email from Dharmin Pathak (see attached). The voluntary Part C.I.E. monitoring condition for Florfenicol is carried over from the previous permit. Most of the maximum usage rates identified in the permit renewal application are less than or equal to the maximum usage rates approved in the previously issued permit (see Therapeutic Chemical Usage attachment). The proposed usage rates for Terramycin 200 and Parasite-S (37% formaldehyde solution) have increased. The quarterly monitoring/reporting requirement (only when used during the quarter)

Summary of Review

for Formaldehyde is carried over from the previous permit (see Part C.I.E.). Since formaldehyde is classified as a probable human carcinogen, concentrations shall not be detectable using the most sensitive analytical method available.

All of the Pollutant Group 1 application sampling requirements were not completed with the permit application due to an interagency misunderstanding. The Part C.I.F. condition included in the permit requires the permittee to complete the Pollutant Group 1 sampling requirements within 2 years of permit issuance. At least three effluent results are required for each parameter. The permittee may wish to conduct influent sampling to demonstrate net additions/reductions, but it's not required at this time. The permittee shall use the Pollutant Group 1 parameters from the 11/2016-revised version of the permit application (in case parameters change with subsequent updates to the application). Upon receipt of the Pollutant Group 1 sampling results, DEP will determine whether a permit amendment is needed.

Some clarifications on information contained in the permit application are provided below:

- The 8,490 lbs of production estimates found in Module 3 are based on an average of the previous 5 years of total production. The anticipated annual production (page 8 of application) of 12,000 lbs is based on a maximum that the facility has produced. That number can vary widely on any given year due to the needs of Fisheries Management and the different species the facility may be rearing.

- The total annual production numbers in the application are based on everything stocked between February and December. September is typically when there is the most biomass on station since the cool water fish are at their final growth stage. With some of the species being in the ponds and others in the raceways, there is no way of knowing what amount of biomass is on site at any given time since there is no way to inventory the fish growing in the ponds. The total annual production numbers will vary widely from year to year as programs are added or changed.

- Regarding the discrepancy of the month of maximum feeding: The month of maximum feeding is very weather dependent. If the water remains warm through the months of September and October, then feeding is continued to maintain fish growth. In the past few years, temperatures had been dropping off early in September, so maximum feeding usually occurred in August during those times.

- The facility consists of twenty-eight 100 ft long raceways, four 200 ft long raceways, and eleven earthen ponds.

The required pollutant sampling frequency at Outfall 002 in the previously issued permit was 1/discharge. For this renewal, the frequency is updated to mirror the Outfall 001 requirements. For any sampling period where Outfall 002 does not discharge, the DMR should indicate "no discharge".

DRBC issued its latest water withdrawal docket D-1980-032 CP-4 for this facility on December 4, 2013. There is no current DRBC discharge docket available on the DRBC's "Approved Dockets" interactive map. According to D-1980-032 CP-4, the last discharge docket for this facility was approved on October 26, 1977 (D-1977-088 CP).

The previously issued permit expired on December 31, 2018 and the application for permit renewal was submitted on time. There are no open violations for this client that would warrant withholding the issuance of this permit. EPA waiver is in effect.


Watershed Information.pdf


Therapeutic Chemical Usage.pdf


Florfenicol.pdf

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.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001 & 002	Design Flow (MGD)	1.56
Latitude	41º 44' 15.8598" (001) 41º 44' 9.258" (002)	Longitude	-75º 26' 47.5728" (001) -75º 26' 43.602" (002)
Quad Name	Forest City	Quad Code	0542
Wastewater Description:	IW Process Effluent without ELG		

Receiving Waters	West Branch Lackawaxen River	Stream Code	6066
NHD Com ID	25922006	RMI	19.9
Drainage Area	6.42	Yield (cfs/mi^2)	See narrative above
Q_{7-10} Flow (cfs)	See narrative above	Q_{7-10} Basis	See narrative above
Elevation (ft)	1779	Slope (ft/ft)	0.013
Watershed No.	1-B	Chapter 93 Class.	HQ-CWF/MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake		Easton Area Water System	
PWS Waters	Delaware River	Flow at Intake (cfs)	1105
PWS RMI	109.8	Distance from Outfall (mi)	~142