

Northeast Regional Office CLEAN WATER PROGRAM

Application Type

Facility Type

Permit Type

Individual

NPDES PERMIT FACT SHEET PESTICIDES

Application No.

PA0276324/ WQM 3520804

Authorization ID

1016696 1314900

Applicant Name	Applicant Name PA American Water Co.		Watres Reservoir IPEST		
Applicant Address	2699 Stafford Avenue	Facility Address	Watres Road		
	Scranton, PA 18505-3608		Spring Brook Township, PA 18444		
Applicant Contact	Nancy Donahue	Facility Contact	Nancy Donahue		
Applicant Phone	(570) 696-2878	Facility Phone	(570) 696-2878		
Client ID	87712	New Site ID	843018		
SIC Code 4941		Municipality	Spring Brook Township		
SIC Description	C Description Trans. & Utilities - Water Supply		Lackawanna		
Date Application Rec	eived <u>May 15, 2020</u>	WQM Required	No		
Date Application Acce	epted May 18, 2020	EPA Waived	No		

Internal Review and Recommendations

The applicant is requesting a new NPDES individual permit for a discharge from the application of pesticides for the control of algae in Watres Reservoir. The application indicates that the uncontrolled growth of the target algae in the 170-acre Reservoir, which is a potable drinking water supply, would result in poor water quality from high abundance of nuisance green and blue-green planktonic algae genera. These species reportedly have the ability to develop at densities that negatively affect water clarity, dissolved oxygen levels and shoreline recreational activities The Reservoir is located on Spring Brook Creek which is a High Quality, Cold Water Fishes (HQ-CWF) designated receiving water. Per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than the designated use. PA American Water is the regional public water supplier which utilizes the Reservoir.

The applicant is proposing to use the following pesticides and application rates for up to 20 treatments:

Treatment Area / Acreage	Name	Manufacturer (& EPA Reg. #)	Max. Dose	Dose	Target Organisms
85 acres per treatment	Copper Sulfate Crystals	Chem One LTD (56576-1)	578 lbs	0.68 lbs per acre foot	Various Algae

WQM Permit 3520804 providing joint PA DEP and PA Fish and Boat Commission authorization will be issued simultaneously with the NPDES permit.

Since the receiving water is classified as a High Quality, Cold Water Fishes (HQ-CWF) resource, the required Antidegradation Module was submitted with the application. The narrative discusses non-discharge alternatives that were considered, but were determined to be infeasible/ineffective.

Approve	Deny	Signatures	Date		
X		Berna / Fish			
		Bernard Feist, P.E. / Environmental Engineer	May 26, 2020		
Х		Amy M. Bellanca (signed)			
		Amy M. Bellanca, P.E. / Environmental Engineer Manager	6-1-20		

Internal Review and Recommendations

A Pesticides Discharge Management Plan (PDMP) was submitted with the application and it includes the required elements listed in the instructions for the individual pesticides permit.

Antidegradation Review Conclusion: Based on our evaluation of the non-discharge alternatives proposed, non-discharge alternatives are not feasible. The applicant proposes use of appropriate pesticides for the purpose, with minimum effects to non-targeted species, and application at low doses. These factors will minimize short-term impacts on water quality. EPA has previously evaluated the registered pesticide(s) in accordance with FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) for usage as Aquatic Pesticide(s), taking into account human health and ecological risk assessment, and determined that usage following the most recent pesticide label was protective. Therefore, the requirements of §93.4a and §93.4c (b)(1)(i) are satisfied and the application is approved. Copper sulfate is widely used throughout PA and is viewed as an effective measure to control algal blooms in large lakes.

The allowable dose of copper sulfate (which is 0.68 lb/ac-ft per 10 ft. up to 580 lbs total), which includes treating approximately $\frac{1}{2}$ of the reservoir at one time in order to avoid oxygen depletion and to allow 1 – 2 weeks between treatments for oxygen levels to recover.

A number of alternative treatment options were considered by the applicant, but each one was discounted due to their prohibitive costs, ineffectiveness and potential adverse impacts to water quality for large impoundments such as Watres Reservoir

Any focus on improved management of fertilizers or other nitrogen and phosphorus nonpoint sources in the drinking water supply watershed would be an alternate to control algae blooms but this practice cannot be feasible for Watres Reservoir because PA-American Water only owns a 100-foot buffer around the reservoir and cannot control the nitrogen and phosphorus nonpoint sources in Watres's watershed. Application of copper sulfate is the most environmentally sound and cost-effective method of controlling algae formation in the reservoir.

The following Special Conditions are included in the permit to: 1) require the permittee to comply with the most recent EPA-approved pesticide label requirements and 2) require posting of signage to advise of any water usage restrictions.

The Applicant is the public water supplier.

The NMS query "Violations – eFACTS – Open Violations for Client by Permit Number" was run. There are currently open violations.

FACILITY	PF KIND	PF STATUS	INSP PROGRAM	PROGRAM SPECIFIC ID	INSP ID	VIOLATION ID	INSPECTION CATEGORY	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR	INSP REGION
STEELTON WATER FILTRATION PLT	Public Administration	Active	Storage Tanks	22-63836	2985074	874029	PF	12/11/2019	245.612(D)	Failure to meet containment requirements		SCRO
STEELTON WATER FILTRATION PLT	Public Administration	Active	Storage Tanks	22-63836	2985074	874030	PF	12/11/2019	245.612(D)	Failure to meet containment requirements		SCRO
PA AMERICAN WATER COMPANY SCRANTON WWTP	Sewage Non- Publicly Owned (Non-Muni)	Active	WPC NPDES	PA0026492	3005028	878762	PF	12/20/2019	92A.46	NPDES - Violation of Part C permit condition(s)	GOLOBEK, DAVID	NERO
EXETER TWP STP	Sewage Non- Publicly Owned (Non-Muni)	Active	WPC NPDES	PA0026972	3034982	885063	PF	05/14/2020	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	AMMON, ERICK	SCRO
TURBOTVILLE WWTP	Sewage Non- Publicly Owned (Non-Muni)	Active	WPC NPDES	PA0028100	3019738	882495	PF	03/23/2020	92A.44	NPDES - Violation of effluent limits in Part A of permit	SPRINGER, JOHN	NCRO
TURBOTVILLE WWTP	Sewage Non- Publicly Owned (Non-Muni)	Active	WPC NPDES	PA0028100	3019841	882508	PF	03/23/2020	92A.44	NPDES - Violation of effluent limits in Part A of permit	SPRINGER, JOHN	NCRO
PA AMER WATER POCONO COUNTRY PLACE WWTP	Sewage Non- Publicly Owned (Non-Muni)	Active	WPC NPDES	PA0060097	2974784	871745	PF	12/23/2019	92A.46	NPDES - Violation of Part C permit condition(s)	ACKERS, DANIEL	NERO

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.