

Central Office
CLEAN WATER PROGRAM

Application Type Renewal
 Facility Type Pesticides
 Permit Type Individual

NPDES PERMIT FACT SHEET
PESTICIDES

Application No. PA0270784
 APS ID 842101
 Authorization ID 1287898

Applicant and Facility Information

Applicant Name	<u>PA Fish & Boat Comm</u>	Facility Name	<u>Pfbc Statewide Algicide Herbicide Or Fish Cntrl Treatment Area</u>
Applicant Address	<u>1735 Shiloh Road</u> <u>State College, PA 16801-8400</u>	Facility Address	<u>1735 Shiloh Road</u> <u>State College, PA 16801-8400</u>
Applicant Contact	<u>Brian Niewinski</u>	Facility Contact	<u>Brian Niewinski</u>
Applicant Phone	<u>(814) 355-4837</u>	Facility Phone	<u>(814) 353-2224</u>
Client ID	<u>87637</u>	Site ID	<u>759060</u>
SIC Code	<u>0782,0921</u> <u>Agriculture - Fish Hatcheries and Preserves, Agriculture - Lawn and Garden Services</u>	Municipality	<u>Statewide</u>
SIC Description		County	<u>Statewide</u>
Date Application Received	<u>August 30, 2019</u>	WQM Required	<u>No</u>
Date Application Accepted	<u>September 11, 2019</u>	EPA Waived	<u>Yes</u>
Purpose of Application	<u>Renewal of an individual NPDES Pesticides and Joint 91.38 Permit</u>		

Internal Review and Recommendations

The Pennsylvania Fish & Boat Commission (PFBC) applied on August 30, 2019 for the renewal of an individual NPDES Permit for Discharges from the Application of Pesticides and coverage under a 91.38 Joint Permit. The use of pesticides at fish production ponds (including all State Fish Hatcheries) is managed by the Fish Production Services Program Chief's office located at 1735 Shiloh Road, State College, PA. Pesticides application within Rights of Way to keep access areas clutter free and safe for recreational access is managed by the Construction and Maintenance Division Chief's office located at 450 Robinson Lane, Bellefonte, PA. The PFBC currently holds two separate permits for the application of pesticides: an NPDES individual permit for pesticides application, and a Chapter 91.38 Joint Permit for the use of algicides, herbicides, and fish control chemicals. With this renewal DEP will issue an NPDES permit that includes the conditions of the 91.38 Joint Permit. The appropriate language addressing the conditions of the Chapter 91.38 permit will be incorporated into the renewed NPDES permit under Part C. Upon issuance of a final NPDES permit, the existing Joint 91.38 Permit No. 9915801 will be revoked.

This permit authorizes the PFBC to use pesticides to control a variety of weeds and algae in fish hatcheries and state owned lakes. The goal for controlling vegetation in production ponds is to maximize the number of fish that can be harvested and used for stocking recreational fishing waters. Pesticides are also used to aid in clearing and maintaining access areas to lakes for recreational use. Pesticides targeting specific plant species are used to prevent excessive vegetation from blocking public access to waters and to maintain aesthetics for recreational boaters and fishers. A Pesticides Discharge Management

Approve	Deny	Signatures	Date
√		/s/ / Zachary Steckler, E.I.T.	December 13, 2019
√		/s/ / Sean M Furjanic, P.E. Division of NPDES Permitting	December 19, 2019

Internal Review and Recommendations

Plan (PDMP) was submitted with the application and includes the required elements listed in the instructions for the Individual Pesticides permit.

A query for any open violations was completed on WMS and returned no results.

Proposed Treatment Areas, Waterbodies, and Pesticides

The application is proposing the use of 14 different pesticides as needed over 94 total treatment sites throughout the Commonwealth (13 fish hatcheries and 81 recreation and maintenance access areas). See Attachments A and B for a full list of treatment site locations, areas, frequencies, receiving waters, and Chapter 93 classifications. The treatment sites numbered 1 through 13 are all state fish hatcheries, and numbers 14 through 94 are access areas. Attachment C shows the proposed pesticide chemicals as provided with the application package. It should be noted that the maximum dosage listed in the table in Attachment C represents the maximum total annual application rate. Attachment D shows the specific application areas, depths, and dosages for treatment areas 1 through 4, which are the only state fish hatcheries under this permit application at which they are proposing to apply pesticides directly to the fish production ponds. For all pesticides approved for use under this permit, all specifications for maximum application rate per treatment or time between treatments that are listed on the product label must be followed.

PNDI searches were completed for each proposed treatment area, with 51 sites returning Conservation and Avoidance Measures for consideration or Potential Impacts with further review needed. At this time, all further agency review responses have been received and all conditions satisfied.

Pesticides, maximum application doses, and treatment areas identified in the permit application are authorized after issuance of permit. The permittee must submit to DEP a request for approval for any change in the pesticide use pattern for an authorized treatment area, a change in the pesticide (active ingredient) that will be used for a treatment area, or an increase in the planned maximum dosage of pesticide that will be used in a treatment area. This request for approval may be submitted in lieu of a formal permit amendment. The permittee shall submit requests at least 30 days in advance of anticipated changes, and requests should include all applicable information regarding the pesticide application, treatment area and frequency, surface waters affected, and all other items as listed in part C.VI.A. of the NPDES Individual Pesticide permit, Authorized Pesticides and Application Rates. After a request for approval is submitted, permittees may implement the proposed changes after approval from DEP or after a period of 30 days.

Anti-Degradation

The water bodies listed in Table 1 below are classified as HQ/EV, and the Antidegradation Module (3800-PM-BCW0025d) was submitted with the application.

Table 1 – Treatment Areas Draining to HQ/EV Waterbodies

Treatment Area (No.)	Water Body Name	HQ or EV	Pesticide Name(s)	Planned Max Annual Dose	Units
5	Spring Creek	HQ	Rodeo	6.0	pints/acre
6	Spring Creek	HQ	Reward Diquat	2.0	gallons/acre
53	Children’s Lake	HQ	Snapshot 2.5 TG	600.0	lbs./acre
22	Dutch Fork Lake	HQ	Roundup Custom	8.0	quarts/acre
25	Hankins Pond	HQ	Turflon II Amine Aquasweep	9.0	lbs./acre
64	Harveys Lake	HQ	Roundup Custom	8.0	quarts/acre
26	Hemlock Lake	HQ	Snapshot 2.5 TG	600.0	lbs./acre
30	Hunters Lake	EV	Turflon II Amine Aquasweep	9.0	lbs./acre
10	Yellow Breeches Creek	HQ	Aquaneat	6.0	pints/acre
33	Kyle Lake	HQ	Roundup Custom	8.0	quarts/acre
65	Lake Wallenpaupack	HQ	Turflon II Amine Aquasweep	9.0	lbs./acre
70	Long Pine Run Reservoir Access	HQ	Snapshot 2.5 TG	600.0	lbs./acre
36	Lower Woods Pond	HQ	Turflon II Amine Aquasweep	9.0	lbs./acre

Internal Review and Recommendations

74	Opossum Lake Access	HQ	Roundup Custom	8.0	quarts/acre
12	Oswayo Creek	HQ	Reward Diquat	2.0	gallons/acre
13	Logan Branch	HQ	Cutrine Ultra	3.0	gallons/acre-ft
2	WB Lackawaxen River	HQ	Reward Diquat	2.0	gallons/acre
42	Rose Valley Lake	EV	Polaris	6.0	pints/acre
45	Struble Lake	HQ	Turflon II Amine Aquasweep	9.0	lbs./acre
7	Fishing Creek	HQ	Rodeo	6.0	pints/acre
48	Upper Woods Pond	HQ	Snapshot 2.5 TG	600.0	lbs./acre
50	White Oak Pond	HQ	Turflon II Amine Aquasweep	9.0	lbs./acre
94	Yellow Breeches Creek	HQ	Roundup Custom	8.0	quarts/acre

DEP requested more information regarding the use of Snapshot 2.5 TG in HQ/EV watersheds. DEP also requested more detail on the specific application of each proposed pesticide and clarification of the application types “direct” and “water’s edge”. The PFBC responded with the requested information and it was stated that no chemicals considered toxic to aquatic life will be applied directly to surface waters or within applicable buffer zones along bank areas. The term “water’s edge” refers to pesticide applications that occur within 35 feet from surface waters (top of bank) unless there is no vegetated buffer, in which case “water’s edge” means pesticide applications that occur within 100 feet from surface waters. For all proposed pesticides, the appropriate application method, maximum individual and annual dosage limits, and time between treatments shall be followed as stated on the product label.

The application’s antidegradation analysis explains that the Fish and Boat Commission selects pesticides to use in its production ponds and access areas based on their ability to target specific species of vegetation and for being relatively non-toxic to non-target species. They also attempt to select non-conservative chemicals for use in or near waters of the Commonwealth. Alternative pest management options were evaluated, including no action, preventative measures such as pond linings, mechanical or manual removal, and cultural and biological options. All alternative methods were ruled out as impractical, cost prohibitive, or too labor intensive. The Pesticide Discharge Management Plan states that PFBC staff members attend regular meetings and trainings to review spill response and adverse incident reporting procedures. PFBC staff will follow all product label specifications and dosage limits when applying pesticides.

Changes from Previous Permit

With the submission of this permit renewal application the PFBC is proposing to increase the number of permitted treatment areas from 51 to 94 statewide; 6 of the new treatment areas are in HQ/EV watersheds and are listed in Table 1 above. They are also proposing the use of 6 additional pesticides across all treatment areas. New pesticides are being proposed for this permit in an attempt to target specific species of vegetation present across all proposed treatment sites.

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.

ATTACHMENT A

Treatment Area Information							
Treatment Area Table							
Treatment Area (No.)	Municipality	County	Pesticide Use Pattern	Area or Length of Treatment	Treatment Frequency	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)
1	Linesville Hatchery, Linesville, PA	Crawford	3	60 acres	up to 10 times/year	41.64583	-80.42748
2	Pleasant Mount Hatchery, Pleasant Mount, PA	Wayne	3	20 acres	up to 10 times/year	41.73972	-75.44806
3	Tionesta Hatchery, Tionesta, PA	Forest	3	25 acres	up to 10 times/year	41.50756	-79.44988
4	Union City Hatchery, Union City, PA	Erie	3	30 acres	up to 10 times/year	41.9075	-79.81782
5	Bellefonte & Upper Spring Creek Hatchery, Bellefonte, PA	Centre	3	50 acres	up to 10 times/year	40.88273	-77.79402
6	Benner Spring Hatchery, State College, PA	Centre	3	20 acres	up to 10 times/year	40.85762	-77.81694
7	Tylersville Hatchery, Tylersville, PA	Clinton	3	10 acres	up to 10 times/year	40.98244	-77.47062
8	Corry Hatchery, Corry, PA	Erie	3	5 acres	up to 10 times/year	41.93019	-79.67036
9	Fairview Hatchery, Fairview, PA	Erie	3	10 acres	up to 10 times/year	42.04262	-80.2763
10	Huntsdale Hatchery, Carlisle, PA	Cumberland	3	40 acres	up to 10 times/year	40.10306	-77.30833
11	Reynoldsdale Hatchery New Paris, PA	Bedford	3	12 acres	up to 10 times/year	40.1575	-78.58
12	Oswayo Hatchery, Oswayo, PA	Potter	3	10 acres	up to 10 times/year	41.92444	-78.00806
13	Pleasant Gap Hatchery Pleasant Gap, PA	Centre	3	10 acres	up to 10 times/year	40.86878	-77.7575
14	Amity Hall	Perry	3	50 feet	2 times/year	40.43111	-77.01278
15	Apple Tree Road	Luzerne	3	50 feet	2 times/year	41.38778	-75.82355
16	Bald Eagle	Clinton	3	400 feet	2 times/year	41.11194	-77.50194
17	Beechwood Lake	Tioga	3	50 feet	2 times/year	41.85276	-77.5097
18	Briar Creek Lake	Columbia	3	50 feet	2 times/year	41.06739	-76.28198
19	Cloe Lake	Jefferson	3	50 feet	2 times/year	40.94977	-78.90559
20	Colyer Lake	Centre	3	100 feet	2 times/year	40.77809	-77.68373
21	Donegal Lake	Westmoreland	3	100 feet	2 times/year	40.13497	-79.37073
22	Dutch Fork Lake	Washington	3	100 feet	2 times/year	40.1426	-80.46926
23	Glade Run Lake	Butler	3	50 feet	2 times/year	40.71543	-79.90036
24	Greenwood	Perry	3	50 feet	2 times/year	40.53056	-77.14194
25	Hankins Pond	Wayne	3	50 feet	2 times/year	41.71967	-75.39434
26	Hemlock Lake	Indiana	3	100 feet	2 times/year	40.86364	-78.88322
27	Hereford Manor Lake	Beaver	3	50 feet	2 times/year	40.81201	-80.16236
28	High Point Lake	Somerset	3	100 feet	2 times/year	39.77926	-79.21821
29	Hoovers Island	Snyder	3	50 feet	2 times/year	40.75028	-76.85806
30	Hunters Lake	Sullivan	3	50 feet	2 times/year	41.38399	-76.62307
31	Kaercher Lake	Berks	3	150 feet	2 times/year	40.56043	-75.96313

32	Kahle Lake	Clarion	3	100 feet	2 times/year	41.23201	-79.64707
33	Kyle Lake	Jefferson	3	50 feet	2 times/year	41.15902	-78.84161
34	Leaser Lake	Lehigh	3	150 feet	2 times/year	40.67099	-75.8334
35	Lily Lake	Luzerne	3	50 feet	2 times/year	41.13832	-76.08359
36	Lower Woods Pond	Wayne	3	50 feet	2 times/year	41.73649	-75.27027
37	Mauch Chunk Lake	Carbon	3	100 feet	2 times/year	40.83557	-75.81777
38	Minsi Lake	Northampton	3	100 feet	2 times/year	40.91385	-75.17824
39	Montgomery Ferry	Perry	3	50 feet	2 times/year	40.50333	-76.97556
40	Lake Nessmuk	Tioga	3	50 feet	2 times/year	41.72711	-77.28879
41	Newton Hamilton	Mifflin	3	50 feet	2 times/year	40.3925	-77.83417
42	Rose Valley Lake	Lycoming	3	150 feet	2 times/year	41.39421	-76.99842
43	Lake Somerset	Somerset	3	100 feet	2 times/year	40.03143	-79.06191
44	Stevens Lake	Wyoming	3	50 feet	2 times/year	41.59917	-75.94278
45	Struble Lake	Chester	3	50 feet	2 times/year	40.11481	-75.85934
46	Tamarack Lake	Crawford	3	350 feet	2 times/year	41.59709	-80.09428
47	Union City Res.	Erie	3	50 feet	2 times/year	41.91306	-79.81444
48	Upper Woods Pond	Wayne	3	50 feet	2 times/year	41.7602	-75.27617
49	Walker Lake	Snyder	3	50 feet	2 times/year	40.80432	-77.18059
50	White Oak Pond	Wayne	3	50 feet	2 times/year	41.64454	-75.37664
51	Whites Ferry	Wyoming	3	50 feet	2 times/year	41.477628	-75.905522
52	Auburn Access	Schuylkill	3	50 feet	2 times/year	40.6021	-76.0883
53	Children's (Boiling Springs) Lake	Cumberland	3	50 feet	2 times/year	40.14722	-77.12528
54	Conewago Creek Access	York	3	50 feet	2 times/year	40.11208	-76.70942
55	East Bangor Lake	Northampton	3	50 feet	2 times/year	40.884243	-75.185868
56	Epler Access	Berks	3	50 feet	2 times/year	40.39654	-75.9736
57	Falmouth Access	Lancaster	3	50 feet	2 times/year	40.11917	-76.70972
58	Five Locks Access	Berks	3	50 feet	2 times/year	40.5225	-75.99778
59	Fort Hunter Access	Dauphin	3	50 feet	2 times/year	40.34354	-76.91119
60	Goldsboro Access	York	3	50 feet	2 times/year	40.16111	-76.74889
61	Good Hope Access	Cumberland	3	50 feet	2 times/year	40.25889	-76.97639
62	Halifax Access	Dauphin	3	50 feet	2 times/year	40.49777	-76.94654
63	Harris Pond	Luzerne	3	50 feet	2 times/year	41.29294	-76.13214
64	Harveys Lake	Luzerne	3	50 feet	2 times/year	41.36429	-76.05765

65	Lake Wallenpaupack	Wayne	3	350 feet	2 times/year	41.45972	-75.19
66	Letterkenny Reservoir Access	Franklin	3	50 feet	2 times/year	40.112008	-77.696042
67	Levittown Lake Access	Bucks	3	50 feet	2 times/year	40.1471	-74.81868
68	Lily Lake	Luzerne	3	50 feet	2 times/year	41.13832	-76.08359
69	Long Arm Dam Access (Sheppard Reservoir)	York	3	50 feet	2 times/year	39.751214	-76.990709
70	Long Pine Run Reservoir Access	Adams	3	50 feet	2 times/year	39.93722	-77.44583
71	Middletown Reservoir Access	Dauphin	3	50 feet	2 times/year	40.18611	-76.73306
72	Muddy Creek Access	York	3	50 feet	2 times/year	40.96326	-80.12881
73	Narrowsburg Access	Wayne	3	50 feet	2 times/year	41.61056	-75.06694
74	Opossum Lake Access	Cumberland	3	50 feet	2 times/year	40.22922	-77.27767
75	Oxbow Lake	Wyoming	3	50 feet	2 times/year	41.60972	-75.89417
76	Phoenixville Access	Chester	3	50 feet	2 times/year	40.15866	-75.51092
77	Riegelsville Access	Bucks	3	50 feet	2 times/year	40.581805	-75.196082
78	Route 33 Access	Northampton	3	50 feet	2 times/year	40.642948	-75.284232
79	Sandts Eddy Access	Northampton	3	50 feet	2 times/year	40.75889	-75.18722
80	Sayre Access	Bradford	3	50 feet	2 times/year	41.99583	-76.47333
81	Sheldy Road Access	Berks	3	50 feet	2 times/year	40.41186	-76.08792
82	Slackwater-Rockhill Access	Lancaster	3	50 feet	2 times/year	39.98333	-76.35722
83	South Pottstown Access	Chester	3	50 feet	2 times/year	40.24111	-75.65
84	Speedwell Forge Lake Access	Lancaster	3	50 feet	2 times/year	40.2114	-76.31917
85	Terrytown Access	Bradford	3	50 feet	2 times/year	41.69444	-76.28194
86	Tunkhannock Access	Wyoming	3	50 feet	2 times/year	40.461349	-79.368321
87	Upper Black Eddy Access	Bucks	3	50 feet	2 times/year	40.565323	-75.09874
88	Waterworks Access	Lebanon	3	50 feet	2 times/year	40.37361	-76.53611
89	Waynesboro Reservoir Access	Adams	3	50 feet	2 times/year	39.81806	-77.45528
90	Winola Lake	Wyoming	3	50 feet	2 times/year	41.51006	-75.84285
91	Wrightsville Access	York	3	50 feet	2 times/year	40.02394	-76.52464
92	Wysox Access	Bradford	3	50 feet	2 times/year	41.753801	-76.41069
93	Yardley Access	Bucks	3	50 feet	2 times/year	40.25278	-74.84556
94	Yellow Breeches Easement	Cumberland	3	50 feet	2 times/year	40.184627	-76.912136

ATTACHMENT B

Treatment Area Information				
Surface Water Table				
Treatment Area (No.)	Surface Water Name	Application Type	Ch 93 Class	Pesticide Impairment
1	Pymatuning Reservoir	Direct, Water's Edge	WWF	No
2	WB Lackawaxen River	Direct, Water's Edge	HQ-CWF	No
3	Allegheny River	Direct, Water's Edge	WWF	No
4	Bentley Run	Direct, Water's Edge	CWF	No
5	Spring Creek	Direct, Water's Edge	HQ-CWF	No
6	Spring Creek	Direct, Water's Edge	HQ-CWF	No
7	Fishing Creek	Direct, Water's Edge	HQ-CWF	No
8	UNT to SB French Creek	Direct, Water's Edge	CWF	No
9	UNT to Trout Run	Direct, Water's Edge	CWF	No
10	Yellow Breeches Creek	Direct, Water's Edge	HQ-CWF	No
11	Dunning Creek	Direct, Water's Edge	WWF	No
12	Oswayo Creek	Direct, Water's Edge	HQ-CWF	No
13	Logan Branch	Direct, Water's Edge	HQ-CWF	No
14	Juniata River	Water's Edge	WWF	No
15	Susquehanna River	Water's Edge	WWF	No
16	Bald Eagle Creek	Water's Edge	CWF	No
17	Beechwood Lake	Water's Edge	TSF	No
18	Briar Creek Lake	Water's Edge	CWF	No
19	Cloe Lake	Water's Edge	CWF	No
20	Colyer Lake	Water's Edge	CWF	No
21	Donegal Lake	Water's Edge	TSF	No
22	Dutch Fork Lake	Water's Edge	HQ-WWF	No
23	Glade Run Lake	Water's Edge	WWF	No
24	Juniata River	Water's Edge	WWF	No
25	Hankins Pond	Water's Edge	HQ-CWF	No
26	Hemlock Lake	Water's Edge	HQ-CWF	No
27	Hereford Manor Lake	Water's Edge	WWF	No
28	High Point Lake	Water's Edge	CWF	No
29	Susquehanna River	Water's Edge	WWF	No
30	Hunters Lake	Water's Edge	EV	No
31	Kaercher Lake	Water's Edge	WWF	No
32	Kahle Lake	Water's Edge	CWF	No
33	Kyle Lake	Water's Edge	HQ-CWF	No
34	Leasure Lake	Water's Edge	CWF	No
35	Lily Lake	Water's Edge	CWF	No
36	Lower Woods Pond	Water's Edge	HQ-CWF	No
37	Mauch Chunk Lake	Water's Edge	CWF	No
38	Minsi Lake	Water's Edge	CWF	No
39	Susquehanna River	Water's Edge	WWF	No
40	Nesmuck Lake	Water's Edge	CWF	No
41	Juniata River	Water's Edge	WWF	No
42	Rose Valley Lake	Water's Edge	EV	No
43	Somerset Lake	Water's Edge	WWF	No

44	Stevens Lake	Water's Edge	CWF	No
45	Struble Lake	Water's Edge	HQ-TSF	No
46	Tamarack Lake	Water's Edge	WWF	No
47	Union City Res.	Water's Edge	CWF	No
48	Upper Woods Pond	Water's Edge	HQ-CWF	No
49	Walker Lake	Water's Edge	TSF	No
50	White Oak Pond	Water's Edge	HQ-CWF	No
51	Susquehanna River	Water's Edge	WWF	No
52	Schuylkill River	Water's Edge	CWF	No
53	Children's Lake	Water's Edge	HQ-CWF	No
54	Susquehanna River	Water's Edge	WWF	No
55	East Bangor Lake	Water's Edge	CWF	No
56	Schuylkill River	Water's Edge	WWF	No
57	Conestoga River	Water's Edge	WWF	No
58	Schuylkill River	Water's Edge	WWF	No
59	Susquehanna River	Water's Edge	WWF	No
60	Susquehanna River	Water's Edge	WWF	No
61	Conodoguinet Creek	Water's Edge	WWF	No
62	Susquehanna River	Water's Edge	WWF	No
63	Harris Pond	Water's Edge	CWF	No
64	Harveys Lake	Water's Edge	HQ-CWF	No
65	Lake Wallenpaupack	Water's Edge	HQ-CWF	No
66	Letterkenny Reservoir	Water's Edge	WWF	No
67	Levittown Lake	Water's Edge	TSF	No
68	Lily Lake	Water's Edge	CWF	No
69	Sheppard Reservoir	Water's Edge	WWF	No
70	Long Pine Run Reservoir	Water's Edge	HQ-CWF	No
71	Middletown Reservoir	Water's Edge	WWF	No
72	Susquehanna River	Water's Edge	WWF	No
73	Delaware River	Water's Edge	WWF	No
74	Opossum Lake	Water's Edge	HQ-TSF	No
75	Oxbow Lake	Water's Edge	CWF	No
76	Schuylkill River	Water's Edge	WWF	No
77	Delaware River	Water's Edge	WWF	No
78	Lehigh River	Water's Edge	WWF	No
79	Delaware River	Water's Edge	WWF	No
80	Susquehanna River	Water's Edge	WWF	No
81	Schuylkill River	Water's Edge	WWF	No
82	Conestoga River	Water's Edge	WWF	No
83	Schuylkill River	Water's Edge	WWF	No
84	Speedwell Forge Lake	Water's Edge	WWF	No
85	Susquehanna River	Water's Edge	WWF	No
86	Susquehanna River	Water's Edge	WWF	No
87	Delaware River	Water's Edge	WWF	No
88	Swatara Creek	Water's Edge	WWF	No
89	Waynesboro Reservoir	Water's Edge	CWF	No
90	Winola Lake	Water's Edge	CWF	No

91	Susquehanna River	Water's Edge	WWF	No
92	Susquehanna River	Water's Edge	WWF	No
93	Delaware River	Water's Edge	WWF	No
94	Yellow Breeches Creek	Water's Edge	HQ-CWF	No

ATTACHMENT C

Proposed Treatment Information								
Name	Manufacturer	Approved for Aquatic?	EPA Reg. #	Planned Max Annual Dose	Units	No. Treatments/year	Target Pest(s)	Used By
Rodeo	Dow AgroSciences	Yes	62719-324	6.0	pints/acre	Several	Spatterdock, Waterprimrose	Access Areas
Reward Diquat	Syngenta	Yes	100-1091	2.0	gallons/acre	Several	Pondweeds, Milfoil, Najas, Elodea, Coontail, Brittle Naiad, Hydrilla	Hatcheries
Citrine Plus Granular	Applied Biochemists	Yes	8959-12	60.0	lbs./acre	Several	Algae, Filamentous Algae	Hatcheries
Citrine Ultra	Applied Biochemists	Yes	8959-53	3.0	gallons/acre-foot	Several	Algae, Filamentous Algae	Hatcheries
Copper Sulfate	Applied Biochemists	Yes	56576-1-8959	2.7	lbs./acre-foot	Several	Filamentous Algae	Hatcheries
Aquaneat	NuFarm	Yes	228-365	6.0	pints/acre	Several	Narrowleaf Cattail, Phragmites	Access Areas & Hatcheries
Aquashade	Applied Biochemists	Yes	33068-1	2.0	ppm	Several	Leafy Pondweed, Chara, Sledder Naiad, Hydrilla	Hatcheries
Citrine Plus	Applied Biochemists	Yes	8959-10	18.0	gallons/surface acre	Several	Filamentous Algae, Bluegreen Algae	Hatcheries
Snapshot 2.5 TG	Dow AgroSciences	No	62719-175	600.0	lbs./acre	Several	Broadleaf Weeds and Annual Grasses	Access Areas
Turflon II Amine Aquasweep	NuFarm	Yes	228-316	9.0	lbs./acre	Several	Annual and Perennial Broadleaf Weeds	Access Areas
Polaris	NuFarm	Yes	228-534	6.0	pints/acre	Several	Bedstraw, Bishopweed, Buttercup, Carolina geranium, Fescue, Foxtail, Little barley, Seedling Johnsongrass, Wild Carrot, White Clover, Yellow woodsorrel	Access Areas

Approve	Deny	Signatures	Date
√		/s/ / Zachary Steckler, E.I.T.	December 13, 2019
√		/s/ / Sean M Furjanic, P.E. Division of NPDES Permitting	December 19, 2019

Tribune	Syngenta	Yes	100-1390	2.0	gallons/surface acre	Several	Water Lettuce, Water Hyacinth, Duckweed, Salvenia, Pennywort, Frog's Bit, Cattails	Access Areas
SaniDate 5.0 (Green Clean)	Bio Safe Systems	Yes	70299-19	28.5	gallons/acre- foot	Several	Weeds and Algae	Hatcheries
Roundup Custom	Monsanto Co.	Yes	524-343	8	quarts/acre	Several	Annual and Perennial Weeds and Woody Brush and Trees	Hatcheries

ATTACHMENT D

Approve	Deny	Signatures	Date
√		/s/ / Zachary Steckler, E.I.T.	December 13, 2019
√		/s/ / Sean M Furjanic, P.E. Division of NPDES Permitting	December 19, 2019

Municipality: Union City County: Erie Total Area: 0.25 acres
Water Body: Pond # 1 Union City Fish Hatchery Receiving Stream: Bentley Run Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.25 acres	4.0 feet	1 st -0.24 gallons 2 – 7 th -0.20 gallons	7
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.25 acres	4.0 feet	0.50 gallons	2
Curtrine-Plus Granular (EPA Reg. No. 8959-12)	60 lbs/ acre	0.25 acres	4.0 feet	6.5 lbs	2
Curtrine-Ultra (EPA Reg. No. 8959-53)	12 gallons/surface acre *	0.25 acres	4.0 feet	0.50 gallons	2

Municipality: Union City County: Erie Total Area: 0.50 acres
Water Body: Pond # 2 Union City Fish Hatchery Receiving Stream: Bentley Run Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.50 acres	4.0 feet	1 st -0.48 gallons 2 – 7 th -0.24 gallons	7
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.50 acres	4.0 feet	0.75 gallons	2
Curtrine-Plus Granular (EPA Reg. No. 8959-12)	60 lbs/ acre	0.50 acres	4.0 feet	15 lbs	2
Curtrine-Ultra (EPA Reg. No. 8959-53)	12 gallons/surface acre *	0.50 acres	4.0 feet	1.4 gallons	2

Municipality: Union City County: Erie Total Area: 0.60 acres
Water Body: Pond # 3 Union City Fish Hatchery Receiving Stream: Bentley Run Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.60 acres	4.0 feet	1 st -0.58 gallons 2 – 7 th -0.29 gallons	7
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.60 acres	4.0 feet	1.2 gallons	2
Curtrine-Plus Granular (EPA Reg. No. 8959-12)	60 lbs/ acre	0.60 acres	4.0 feet	15 lbs	2
Curtrine-Ultra (EPA Reg. No. 8959-53)	12 gallons/surface acre *	0.60 acres	4.0 feet	1.4 gallons	2

Municipality: Union City County: Erie Total Area: 0.25 acres
Water Body: Pond # 4 Union City Fish Hatchery Receiving Stream: Bentley Run Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.25 acres	4.0 feet	1 st -0.24 gallons 2 – 7 th -0.20 gallons	7
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.25 acres	4.0 feet	0.50 gallons	2
Curtrine-Plus Granular (EPA Reg. No. 8959-12)	60 lbs/ acre	0.25 acres	4.0 feet	7.0 lbs	2
Curtrine-Ultra (EPA Reg. No. 8959-53)	12 gallons/surface acre *	0.25 acres	4.0 feet	0.70 gallons	2

Municipality: Union City County: Erie Total Area: 0.30 acres
Water Body: Pond # 5 Union City Fish Hatchery Receiving Stream: Bentley Run Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.30 acres	4.0 feet	1 st -0.30 gallons 2 – 7 th -0.15 gallons	7
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.30 acres	4.0 feet	0.59 gallons	2
Curtrine-Plus Granular (EPA Reg. No. 8959-12)	60 lbs/ acre	0.30 acres	4.0 feet	7.5 lbs	2
Curtrine-Ultra (EPA Reg. No. 8959-53)	12 gallons/surface acre *	0.30 acres	4.0 feet	0.60 gallons	2

Municipality: Union City County: Erie Total Area: 0.55 acres
Water Body: Pond # 7 Union City Fish Hatchery Receiving Stream: Bentley Run Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.55 acres	4.0 feet	1 st -0.48 gallons 2 – 7 th -0.24 gallons	7
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.55 acres	4.0 feet	0.75 gallons	2
Curtrine-Plus Granular (EPA Reg. No. 8959-12)	60 lbs/ acre	0.55 acres	4.0 feet	15.0 lbs	2
Curtrine-Ultra (EPA Reg. No. 8959-53)	12 gallons/surface acre *	0.55 acres	4.0 feet	1.0 gallons	2

Municipality: Union City County: Erie Total Area: 2.0 acres
Water Body: Pond # 8 Union City Fish Hatchery Receiving Stream: Bentley Run Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	2.0 acres	4.0 feet	1.0 gallons	7
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	2.0 acres	4.0 feet	4.0 gallons	2
Curtrine-Plus Granular (EPA Reg. No. 8959-12)	60 lbs/ acre	2.0 acres	4.0 feet	60.0 lbs	2
Curtrine-Ultra (EPA Reg. No. 8959-53)	12 gallons/surface acre *	2.0 acres	4.0 feet	4.75 gallons	2

Municipality: Tionesta County: Forest Total Area: 0.5 acres
Water Body: Pond # 1, 2, 3, 4, 5, 6, 7, and 8 Receiving Stream: Allegheny River Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.5 acres	4.0 Feet	0.5 gallons	6
Diquat (EPA Reg. No. 100-1061)	2.0 gallons/ surface acre**	0.5 acres	4.0 Feet	1.0 gallons	2
Cutrine Plus (liquid)*** (EPA Reg. No. 8959-10)	18 gallons/ surface acre	0.5 acres	4.0 Feet	1.4 gallons	3

Municipality: Tionesta County: Forest Total Area: 0.5 acres
Water Body: Warm Water Unit and other
Warming Ponds Receiving Stream: Allegheny River Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.5 acres	4.0 Feet	0.5 gallons	6
Diquat (EPA Reg. No. 100-1061)	2.0 gallons/ surface acre**	0.5 acres	4.0 Feet	1.0 gallons	2
Cutrine Plus (liquid)*** (EPA Reg. No. 8959-10)	18 gallons/ surface acre	0.5 acres	4.0 Feet	1.4 gallons	3

Municipality: Pleasant Mount County: Wayne Total Area: 0.61 acres
Water Body: Polishing Pond Receiving Stream: WB Lackawaxen River Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.61 acres	4.0 Feet	0.90 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.61 acres	4.0 Feet	0.61 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 1.0 acres
Water Body: Back East and Back West Pond Receiving Stream: WB Lackawaxen River Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	1.0 acres	4.0 Feet	1.47 gallons	1
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	1.0 acres	4.0 Feet	1.0 gallons	1

Municipality: Pleasant Mount County: Wayne Total Area: 1.0 acres
Water Body: Breast Pond Receiving Stream: WB Lackawaxen River Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	1.0 acres	4.0 Feet	1.47 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	1.0 acres	4.0 Feet	1.0 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 0.37 acres
Water Body: Pond # 1 Receiving Stream: WB Lackawaxen River Avg. Depth: 4.24 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.37 acres	4.24 Feet	0.57 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.37 acres	4.24 Feet	0.39 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 0.32 acres
Water Body: Pond # 2 Receiving Stream: WB Lackawaxen River Avg. Depth: 5.24 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.32 acres	5.24 Feet	0.47 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.32 acres	5.24 Feet	0.42 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 0.36 acres
Water Body: Pond # 3 Receiving Stream: WB Lackawaxen River Avg. Depth: 4.25 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.36 acres	4.25 Feet	0.53 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.36 acres	4.25 Feet	0.38 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 0.38 acres
Water Body: Pond # 4 Receiving Stream: WB Lackawaxen River Avg. Depth: 4.79 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.38 acres	4.79 Feet	0.56 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.38 acres	4.79 Feet	0.46 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 0.54 acres
Water Body: Pond # 5 Receiving Stream: WB Lackawaxen River Avg. Depth: 5.31 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.54 acres	5.31 Feet	0.79 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.54 acres	5.31 Feet	0.72 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 0.91 acres
Water Body: Pond # 6 Receiving Stream: WB Lackawaxen River Avg. Depth: 4.11 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.91 acres	4.11 Feet	1.34 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.91 acres	4.11 Feet	0.94 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 0.93 acres
Water Body: Pond # 7 Receiving Stream: WB Lackawaxen River Avg. Depth: 4.5 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.93 acres	4.5 Feet	1.37 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.93 acres	4.5 Feet	1.05 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 0.53 acres
Water Body: Pond # 8 Receiving Stream: WB Lackawaxen River Avg. Depth: 3.56 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.53 acres	3.56 Feet	0.78 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.53 acres	3.56 Feet	0.47 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 0.46 acres
Water Body: Pond # 9 Receiving Stream: WB Lackawaxen River Avg. Depth: 4.44 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.46 acres	4.44 Feet	0.68 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.46 acres	4.44 Feet	0.51 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 0.53 acres
Water Body: Pond # 10 Receiving Stream: WB Lackawaxen River Avg. Depth: 4.74 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.53 acres	4.74 Feet	0.78 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.53 acres	4.74 Feet	0.62 gallons	6

Municipality: Pleasant Mount County: Wayne Total Area: 3.28 acres
Water Body: Pond # 12 Receiving Stream: WB Lackawaxen River Avg. Depth: 9.07 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	3.28 acres	9.07 Feet	4.8 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	3.28 acres	9.07 Feet	7.4 gallons	6

Municipality: Linesville Hatchery, Pine Township County: Crawford Total Area: 0.25 acres
Water Body: Pump House Pond # 1 Receiving Stream: Pymatuning Sanctuary Avg. Depth: 3.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.25 acres	3.0 Feet	0.25 gallons	3
Citrine Plus (liquid)* (EPA Reg. No. 8959-10)	18 gallons/ surface acre	0.25 acres	3.0 Feet	0.525 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.25 acres	3.0 Feet	0.75 qt	10

Municipality: Linesville Hatchery, Pine Township County: Crawford Total Area: 0.5 acres
Water Body: Pump House Pond # 2, 3, and 4 Receiving Stream: Pymatuning Sanctuary Avg. Depth: 3.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.5 acres	3.0 Feet	0.5 gallons	3
Citrine Plus (liquid)* (EPA Reg. No. 8959-10)	18 gallons/ surface acre	0.5 acres	3.0 Feet	1.05 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.5 acres	3.0 Feet	1.5 qts.	10

Municipality: Linesville Hatchery, Pine Township County: Crawford Total Area: 5.0 acres
Water Body: Building Pond South Receiving Stream: Pymatuning Sanctuary Avg. Depth: 7.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	5.0 acres	7.0 Feet	5.0 gallons	3
Citrine Plus (liquid)* (EPA Reg. No. 8959-10)	18 gallons/ surface acre	5.0 acres	7.0 Feet	24.5 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	5.0 acres	7.0 Feet	8.75 gallons	10

Municipality: Linesville Hatchery, Pine Township County: Crawford Total Area: 3.3 acres
Water Body: Building Pond North Receiving Stream: Pymatuning Sanctuary Avg. Depth: 7.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	3.3 acres	7.0 Feet	3.3 gallons	3
Citrine Plus (liquid)* (EPA Reg. No. 8959-10)	18 gallons/ surface acre	3.3 acres	7.0 Feet	16.2 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	3.3 acres	7.0 Feet	5.8 gallons	10

Municipality: Linesville Hatchery, Pine Township County: Crawford Total Area: 0.25 acres
Water Body: North Pond # 1 Receiving Stream: Pymatuning Sanctuary Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.25 acres	4.0 Feet	0.25 gallons	3
Citrine Plus (liquid)* (EPA Reg. No. 8959-10)	18 gallons/ surface acre	0.25 acres	4.0 Feet	0.7 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.25 acres	4.0 Feet	0.25 gallons	10

Municipality: Linesville Hatchery, Pine Township County: Crawford Total Area: 0.5 acres
Water Body: North Pond # 2, 3, and 4 Receiving Stream: Pymatuning Sanctuary Avg. Depth: 7.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.5 acres	7.0 Feet	0.5 gallons	3
Citrine Plus (liquid)* (EPA Reg. No. 8959-10)	18 gallons/ surface acre	0.5 acres	7.0 Feet	2.45 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.5 acres	7.0 Feet	0.875 gallons	10

Municipality: Linesville Hatchery, Pine Township County: Crawford Total Area: 0.5 acres
Water Body: North Pond # 5 Receiving Stream: Pymatuning Sanctuary Avg. Depth: 4.0 feet

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.5 acres	4.0 Feet	3.3 gallons	3
Citrine Plus (liquid)* (EPA Reg. No. 8959-10)	18 gallons/ surface acre	0.5 acres	4.0 Feet	1.4 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.5 acres	4.0 Feet	0.5 gallons	10

Municipality: Linesville Hatchery, Pine Township County: Crawford Total Area: 1.0 acres
South Pond # 1, 2, 3, 4 Receiving Stream: Pymatuning Sanctuary Avg. Depth: 5.0 feet
Water Body:

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	1.0 acres	5.0 Feet	1.0 gallons	3
Citrine Plus (liquid)* (EPA Reg. No. 8959-10)	18 gallons/ surface acre	1.0 acres	5.0 Feet	3.5 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	1.0 acres	5.0 Feet	1.25 gallons	10

Municipality: Linesville Hatchery, Pine Township County: Crawford Total Area: 0.5 acres
South Pond # 5, 6, 7, 8 Receiving Stream: Pymatuning Sanctuary Avg. Depth: 4.0 feet
Water Body:

TREATMENT INFORMATION					
Chemical	Maximum Dose	Treatment Area	Treatment Depth	Amount Each Treatment	No. Annual Treatments
Reward (EPA Reg. No. 10182-404)	2.0 gallons/ surface acre	0.5 acres	4.0 Feet	0.5 gallons	3
Citrine Plus (liquid)* (EPA Reg. No. 8959-10)	18 gallons/ surface acre	0.5 acres	4.0 Feet	1.4 gallons	3
Aquashade (EPA Reg. No. 33068-1)	32 oz. /acre foot.	0.5 acres	4.0 Feet	0.5 gallons	10