

B. Filing with MassDEP – As previously noted, **only** facilities in Massachusetts that were previously unpermitted and discharge to an Outstanding Resource Water (ORW) and High Quality Waters must submit an NOI to MassDEP. In such cases, a completed copy of the NOI must also be sent to:

Massachusetts Department of Environmental Protection
Division of Watershed Management
8 New Bond Street
Worcester, MA 01606

C. Filing with NH DES – All applicants in New Hampshire must also provide a completed copy of their NOI to NH DES at the following address:

New Hampshire Department of Environmental Services
Water Division, Wastewater Engineering Bureau
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

III. Suggested Notice of Intent (NOI) Format

A. Facility Information

1. *Indicate applicable General Permit for discharge*

MAG640000

NHG640000

2. *Facility Data*

Facility Name Gates Pond Water Treatment Facility

Street/PO Box 112 Gates Pond Rd City Berlin

State MA Zip Code 01503

Latitude 42° 23.499' N Longitude 071° 35.41' W

SIC Code(s) 4941

Type of Business Municipal Drinking Water

3. *Facility Mailing Address (if different from Location Address, above)*

Facility Name Hudson MA DPW

Street/PO Box 1 Municipal Dr. City Hudson

State MA Zip Code 01749

4. Facility Owner:

Legal Name Town of Hudson, Massachusetts

Email rmoriarty@townofhudson.org

Street/PO Box 1 Municipal Dr. City Hudson

State MA Zip Code 01749

Contact Person Robert F Moriarty Jr. Tel # 978-568-9629

Owner is (check one): Federal ☐ State ☐ Tribal ☐ Private ☐

Other (describe)

Town Water Supply

5. Facility Operator (if different from above):

Legal Name Robert F. Moriarty Jr.

Email rmoriarty@townofhudson.org

Street/PO Box 112 Bates Pond Rd. City Berlin

State MA Zip Code 01503

Contact Person Robert F Moriarty Jr. Tel # 978-568-9629

6. Currently (Administratively) Covered Under the Expired PWTF General Permit? (Please check yes or no):

☒ Yes

No

a) Has a prior NPDES permit (either individual or general permit coverage) been granted for the discharge that is listed on the NOI? Yes No If Yes, Permit Number MAG640014

b) Is the discharge a "new discharger" as defined by 40 CFR Section 122.22? Yes ☒ No

c) Is the facility covered by an individual NPDES permit for other discharges? Yes ☒ No

If yes, Permit Number: _____

d) Is there a pending NPDES application (either individual or general permit) on file with EPA for this discharge? Yes ☒ No

If yes, date of submittal: _____ and Permit Number, if available _____

7. Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? See Attachment 1

B. Discharge Information (Attach additional sheets as needed):

1. Name of receiving water into which discharge will occur: Hogbroke Tributary into Assabet River

Check Appropriate Box:

Freshwater

Marine Water

State Water Quality Classification

Class B

Type of Receiving Water Body (e.g., stream, river, lake, reservoir, estuary, etc.) Stream

2. Indicate the frequency of the discharge:

Emergency Only

Infrequent (Once/Twice a Year)

Intermittent***

Continuous

Other***

***If Intermittent (i.e., occurs sometimes but not regularly as in batch discharge), provide # of days per year the discharge occurs _____

***If Other, explain _____

3. Describe the discharge activities for which the owner/applicant is seeking coverage, including process discharges not specifically authorized in the PWTF GP which need to be authorized for discharge (and which attain the effluent limits and other conditions of the general permit.)

(This description should include all treatment methods used on the wastewater prior to discharge including lagoons, baffles, filter presses, etc. If lagoons are used at the facility, please include the number and size of lagoons; the size and elevation of the entry pipe; the time of travel from the entry point of the discharge into the lagoon to the entry point to the receiving waters; and the length of backwash cycle for any combination of filters.)

See attachment 2

4. Attach a line drawing or flow schematic showing water flow through the facility including sources of intake water, operations contributing to flow, treatment units, outfalls, and receiving water(s).

Line drawing or flow diagram attached? See Attachment 3

5. Identify the source of the water being discharged:

Surface water

Groundwater

Other (describe)

6. Number of Outfalls 1 Latitude and Longitude to the nearest second for each Outfall. Attach additional pages if necessary.

☒ Use Map

☒ Box/Point ☐ Current Extent ☐ Coordinates ☐ Located Point ☐ Polygon:

☒ Map Indices **Example Product List**

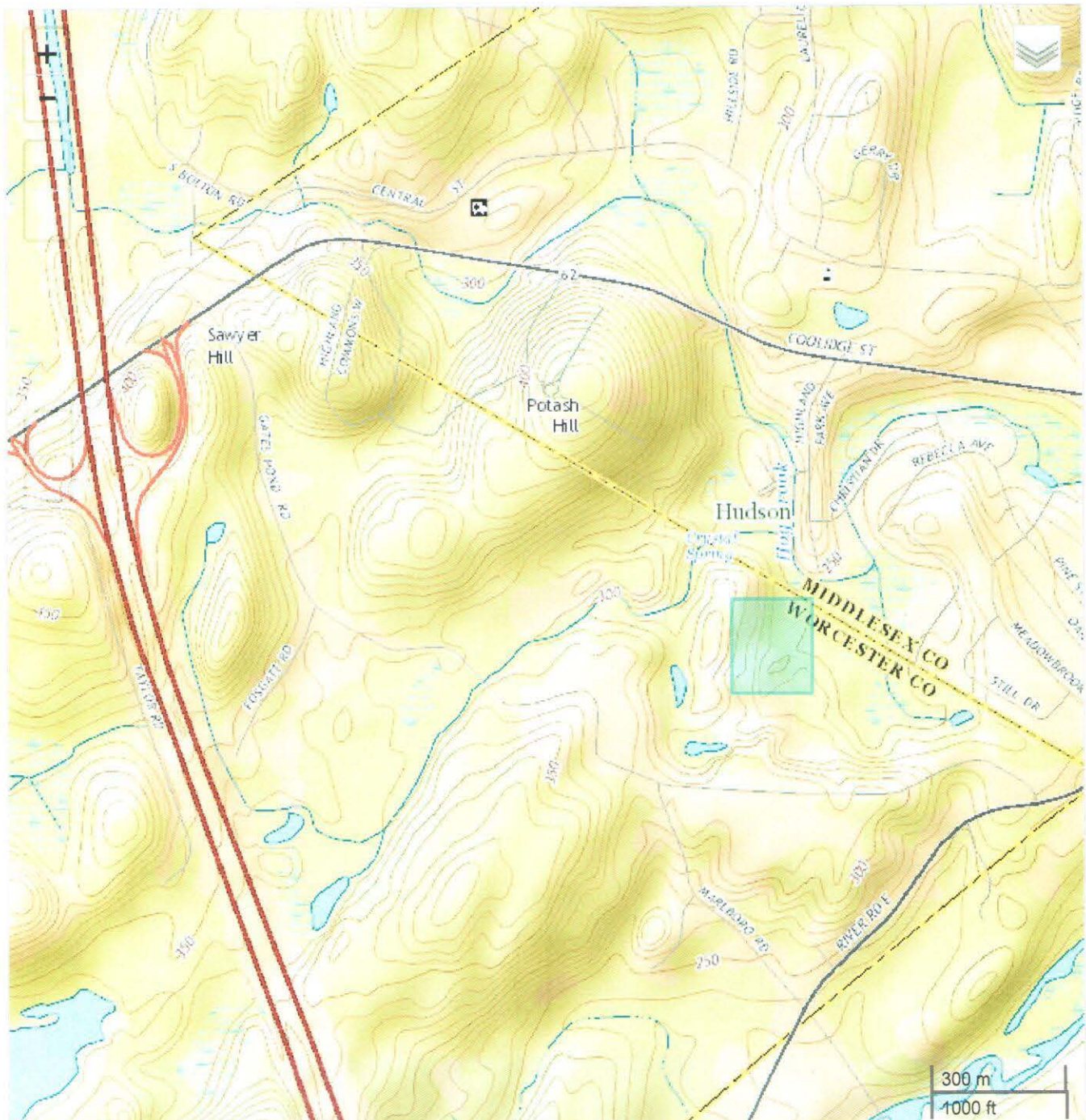
☐ 1 Degree ☐ 15 Minute ☒ 7.5 Minute ☐ All **i** Zoom in to make 7.5 min indices visible

Address/Place

No Results

Go

Clear



Town of Hudson, MA
NPDES General Permit NOI Current Permit No. MAG40014

Sec. B, Item 4

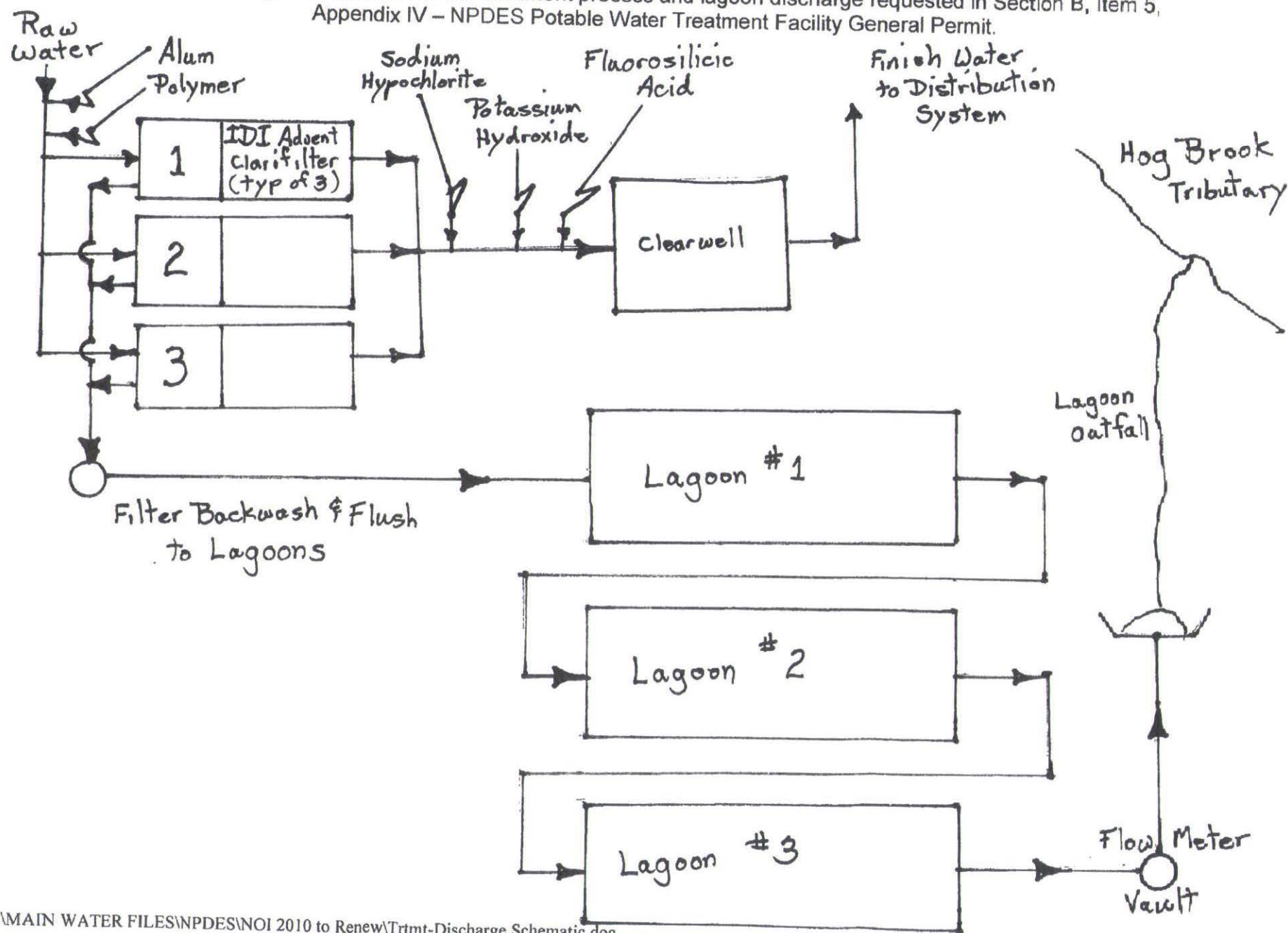
This Permit is for the Town of Hudson, MA Drinking Water Treatment Lagoon Discharge. The following describes our treatment method and lagoon information requested in Section B, Item 4, Appendix IV – NPDES Potable Water Treatment Facility General Permit.

Raw water from Gates Pond Reservoir flows by gravity to the Gates Pond Water Treatment Plant (GPWTP).

Aluminum sulfate and a polymer are mixed with the raw water, which then flows into three (3) Advent Clarifiers for clarification and filtration. Filtered water flows through a common header and is treated with sodium hypochlorite (for disinfection), potassium hydroxide (pH adjustment) and fluorosilicic acid (fluoridation). Treated water then flows into a finished water clearwell. Finished water is pump into the distribution system for consumption by our customers.

Finished water is also used to backwash the filter section of the clarifiers. Backwash water is fed to three (3) settling Lagoons in series via a 16 inch diameter pipe with an invert elevation of 272.33 feet. These lagoons have a volume of 55,320 gallons each. At the maximum flow through the lagoons of 950,000 gallons/day, the backwash waters' travel time through the lagoons to the receiving stream is 5 hours. (Note this is the minimum travel time through the lagoons.)

Town of Hudson, MA NPDES General Permit NOI Current Permit No. MAG40014
 The following is a schematic of our treatment process and lagoon discharge requested in Section B, Item 5,
 Appendix IV – NPDES Potable Water Treatment Facility General Permit.



Outfall # 1 Latitude 42° 23.499' N Longitude 070° 35.41' W
Outfall # _____ Latitude _____ Longitude _____
Outfall # _____ Latitude _____ Longitude _____

7. For each outfall, indicate the proposed sampling location(s) for both effluent and ambient water (when applicable) and proposed consistent times of the month for collecting samples:

Outfall #

Settling Lagoon Outfall. All parameters sampled weekly.
Discharge flow totalized monthly.

Outfall #

Outfall #

C. Effluent Characteristics

1. List here and attach additional information (on separate sheet) on any water additives used at the facility. This includes chemicals (including aluminum, iron, or phosphorus-containing chemicals) for pH adjustment, dechlorination, control of biological growth, and control of corrosion and scale in water pipes.

Alum, Polymer, Sodium Hypochlorite, Potassium Hydroxide.
Fluorosilicic Acid.

2. Report any known remediation activities or water quality issues in the vicinity of the discharge

None known.

3. Are aluminum compounds or polymers used as coagulants at this facility?*

Yes No

*If answer is "Yes" and the facility was *not* covered under the PWTF GP that expired on

10/2/14, additional monitoring data and information is required. **Please complete Item III.C.12.**

4. Does the facility use any alum-based products for algae control?*

Yes_

No

*If answer is "Yes" and the facility was *not* covered under the PWTF GP that expired on 10/2/14, additional monitoring data and information is required. **Please complete Item III.C.12.**

5. Are iron-containing coagulants used at this facility?

Yes_

No

6. Does the facility's discharge contain residual chlorine?

Yes

No

[If Yes, EPA will calculate a Total Residual Chlorine effluent limit for your facility]

7. Does the facility provide treatment to remove arsenic from the raw water source? Yes

No

8. a. Are phosphorus-containing chemicals added to the treated water at this facility? Yes

No

- b. If answer to 8.a. is Yes, does the facility discharge to Phosphorus-Impaired waters? Yes No

- c. If answer to 8.b. is Yes, provide name of P-Impaired waterbody: _____

9. Does the facility remove radium or other radioactive substances from raw water sources to comply with drinking water standards? Yes

No

10. Provide the reported or calculated seven day- ten year low flow (7Q10) of the receiving water
7Q10: 0.0741 cfs

NOTE: For facilities that discharge in New Hampshire, the state permitting authority **must** be contacted at the address listed in Appendix VI of the PWTF GP to determine and/or confirm the 7Q10 and/or dilution factor. For facilities that discharge in Massachusetts, it is highly recommended to contact the relevant state authority (MassDEP) to determine and/or confirm the 7Q10 and/or dilution factor.
Attach any calculation sheets used to support the stream flow and dilution factors. See Appendix VII for equations and additional information.

11. For *each* outfall, provide the following discharge information:

Outfall # 1

- a) *Design Flow of Facility (in million gallons per day, MGD):* 0.95

This value will determine the facility's daily maximum flow limit, up to a maximum of 1.0 MGD.

- b) *Discharge Flow (in gallons per day, GPD):*

Maximum Daily Flow 950,000 GPD

Average Monthly Flow 340,000 GPD

- c) *TSS (mg/l):* Number of samples: 10 (Minimum of 10 samples)

Attachment 4 (A)

7010
Data**StreamStats Version 3.0****Flow Statistics Ungaged Site Report**

Date: Thurs May 4, 2017 2:28:40 PM GMT-4

Study Area: Massachusetts

NAD 1983 Latitude: 42.3912 (42 23 28)

NAD 1983 Longitude: -71.5881 (-71 35 18)

Drainage Area: 2.7 mi²

Low Flows Basin Characteristics			
100% Statewide Low Flow WRIR00 4135 (2.7 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	2.7	1.61	149
Mean Basin Slope from 250K DEM (percent)	3.232	0.32	24.6
Stratified Drift per Stream Length (square mile per mile)	0.11	0	1.29
Massachusetts Region (dimensionless)	0	0	1

Probability of Perennial Flow Basin Characteristics			
100% Perennial Flow Probability (2.7 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	2.7 (above max value 1.99)	0.01	1.99
Percent Underlain By Sand And Gravel (percent)	23.31	0	100
Percent Forest (percent)	67.91	0	100
Massachusetts Region (dimensionless)	0	0	1

Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Bankfull Flows Basin Characteristics			
100% Bankfull Statewide SIR2013 5155 (2.7 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	2.7	0.6	329
Mean Basin Slope from 10m DEM (percent)	7.924	2.2	23.9

Low Flows Statistics						
Statistic	Value	Unit	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
					Min	Max
D50	2.63	ft ³ /s	18		1.11	6.2
D60	1.79	ft ³ /s	20		0.8	3.95
D70	1.01	ft ³ /s	24		0.43	2.31
D75	0.76	ft ³ /s	26		0.32	1.75

Attachment 4(B) 7D10 data

D80	0.62	ft3/s	28		0.26	1.47
D85	0.45	ft3/s	32		0.18	1.09
D90	0.33	ft3/s	37		0.13	0.83
D95	0.19	ft3/s	46		0.0645	0.52
D98	0.12	ft3/s	60		0.0345	0.37
D99	0.0832	ft3/s	65		0.0232	0.28
M7D2Y	0.19	ft3/s	50		0.0623	0.57
AUGD50	0.47	ft3/s	33		0.19	1.14
M7D10Y	0.0741	ft3/s	71		0.0191	0.27

<http://pubs.usgs.gov/wri/wri004135/> (<http://pubs.usgs.gov/wri/wri004135/>)

Ries, K.G., III, 2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p.

Probability of Perennial Flow Statistics						
Statistic	Value	Unit	Standard Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
					Min	Max
PROBPEREN	0.92	dim				

http://pubs.usgs.gov/sir/2006/5031/pdfs/SIR_2006-5031rev.pdf (http://pubs.usgs.gov/sir/2006/5031/pdfs/SIR_2006-5031rev.pdf)

Bent, G.C., and Steeves, P.A., 2006, A revised logistic regression equation and an automated procedure for mapping the probability of a stream flowing perennially in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2006-5031, 107 p.

Bankfull Flows Statistics						
Statistic	Value	Unit	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
					Min	Max
BFWDTH	22.6	ft	21			
BFDPTH	1.28	ft	20			
BFAREA	28.8	ft2	29			
BFFLOW	85.2	ft3/s	55			

<http://pubs.usgs.gov/sir/2013/5155/> (<http://pubs.usgs.gov/sir/2013/5155/>)

Bent, G.C., and Waite, A.M., 2013, Equations for estimating bankfull channel geometry and discharge for streams in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2013-5155, 62 p.

Accessibility**FOIA****Privacy****Policies and Notices**

U.S. Department of the Interior | U.S. Geological Survey

URL: http://streamstatsags.cr.usgs.gov/v3_beta/FTreport.htm

Page Contact Information: StreamStats Help

Page Last Modified: 08/09/2016 14:34:10 (Web1)

[Streamstats Status](#)

[News](#)



Maximum Daily 0.0 mg/l Average Monthly 0.0 mg/l

d) pH (s.u.) : Number of samples: 10 (Minimum of 10 samples)
Minimum 6.5 s.u. Maximum 8.2 s.u.

e) Total Residual Chlorine (ug/l): Number of samples: 10 (Minimum of 10 samples)
Maximum Daily 0.0 ug/l

NOTE: TRC is only required for discharges which have been previously chlorinated or contain residual chlorine

12. The following section must be completed for any facility that answered "Yes" to Question III.C.3 or III.C.4 (e.g. adds an aluminum-containing chemical to the water being treated and/or discharged) **AND** was not covered under the previous PWTF GP (which expired on 10/2/14).

- a) Collect, analyze and submit **12 effluent samples and 10 ambient surface water samples** from a location upstream of and not affected by the discharge. For facilities in New Hampshire and Massachusetts, each sample should be analyzed for total recoverable Al in micrograms per liter. All laboratory results shall be submitted on a separate sheet.
- a. The samples shall be composite samples consisting of four grab samples taken at approximately equal intervals on a flow weighted basis during the time at which the discharge is entering the receiving water after the start of the backwash cycle.
 - b. For each sampling event, the effluent and surface water samples shall be collected on the same day and during a representative discharge event. The samples shall be no more frequent than weekly and, if time allows in completing the NOI, at monthly intervals and at different flow conditions. If taking the ambient water quality sample from lakes/reservoirs, the 10 samples should be composited vertically.
 - c. Discharge flow at the time of effluent sampling should be recorded. Flow conditions at the time of ambient water sampling should be recorded (or estimated from nearest gaging station).
 - d. Do not include dilution when recording the results.
 - e. See Section 2.1.2.3 and Footnote 12 of Section 2.1.1 for MA facilities (or Section 3.1.2.3 and Footnote 10 of 3.1.1 for NH facilities) for key information on minimum level for analysis and sufficiently sensitive test procedures.
 - f. Sampling data that was collected within one year of the effective date of this general permit **AND** that adheres to all of the requirements above may be submitted in lieu of new samples. This must be denoted with the submitted data.
- b) Provide a description of control measures, chemical substitutions, waste handling methods, and operational changes evaluated and/or used by the facility to minimize the discharge of aluminum to surface waters. (Include additional sheet(s), if necessary)

N/A

D. Endangered Species Act Eligibility Information

Using the instructions in Appendix III of the PWTF GP, which of the following criteria apply to your facility?

U.S. Fish and Wildlife Service (USFWS) Criteria: A B C

1. If you selected USFWS criteria B, has consultation with the U.S. Fish and Wildlife Service been completed?

Yes

No

2. If consultation with US Fish & Wildlife Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received?

Yes

No

3. Attach documentation of ESA eligibility for USFWS as required at Part 1.4 and Appendix III of the General Permit. **Documentation attached?** y *see Attachment 5*

4. For facilities seeking coverage under the Potable Water Treatment Facility General Permit for the *first* time, respond to the following questions to assist in ESA eligibility for NMFS:

a) Indicate if the facility discharges into any of the stretches of the following rivers which can support or provide habitat to either Shortnose or Atlantic Sturgeon:

Merrimack River (from Essex Dam in Lawrence, Downstream (including Haverhill) to mouth of River)

Yes

No

Connecticut River (from Turner's Falls, downstream through Holyoke (including Holyoke Dam region)

Yes

No

Taunton River

Yes

No

Piscataqua River (in NH)

Yes

No

b) Has the facility had any previous formal or informal consultation with NMFS?

Yes

No

If yes, attach the results of the consultation(s).

Documentation attached? _____



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
<http://www.fws.gov/newengland>



January 20, 2017

To Whom It May Concern:

This project was reviewed for the presence of federally listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

<http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm> (accessed January 2017)

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Maria Tur of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

E. National Historic Properties Act Eligibility

1. Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes No

2. Have any State or Tribal Historic Preservation Officers been consulted in this determination?
Yes No

If yes, attach the results of the consultation(s). **Documentation attached?** _____

3. Which of the three National Historic Preservation Act scenarios listed in Appendix II, Section III have you met?

1

2

3

F. Supplemental Information

Please provide any supplemental information, including antidegradation review information applicable to new or increased discharges. Attach any analytical data used to support the application. Attach any certification(s) required by the General Permit.

G. Signature Requirements

The NOI must be signed by the operator in accordance with the signatory requirements of 40 CFR § 122.22 (see below) including the following certification:

I certify under penalty of law that (1) the discharge for which I am seeking coverage under the general permit consists solely of a surface water discharge from a potable water treatment facility; (2) any chemicals used to treat the discharge have been identified in this NOI; and (3) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature  Date 5-5-17

Printed Name and Title Robert F. Moriart Jr. Chief Water Operator

Federal regulations require this application to be signed as follows:

1. For a corporation, by a responsible corporate party;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Note: Permits No. MAG640000 and NHG640000 may be found at <http://www3.epa.gov/region1/npdes/pwtfgp.html>

H. “Opt-Out Request” from NetDMR Requirement

1. Check the box if you **are** applying for an “opt-out request.” ☐
2. Provide a detailed explanation of the technical or administrative factors that support your request to “opt-out” from the requirement to submit DMRs and reports electronically. (Add additional lines, if necessary.)
