TOWN OF ANDOVER, MASSACHUSETTS

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DEPARTMENT OF MUNICPAL SERVICES
WATER TREATMENT PLANT
397 LOWELL STREET 01810-4416

June 2, 2017

US EPA Region 1
Office of Ecosystem Protection
PWTF GP Applications Coordinator (OEP06-4)
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Subject: NPDES Potable Water Treatment Facility General Permit
Andover Water Treatment Plant, MAG640058

Dear PWTF GP Applications Coordinator;

Enclosed please find the completed Notice of Intent (NOI) form and other pertinent documents that are being submitted by the Town of Andover for a NPDES Potable Water Treatment Facility General Permit (PWTF GP) for discharge from the Andover Water Treatment Plant. This facility was administratively continued for coverage under the general permit that expired on August 31, 2014.

Discharge consists entirely of backwash effluent residuals originating from the coagulation and media filtration treatment of surface water released to Haggetts Pond.

Should you have any questions regarding this submittal, please contact me at (978) 623-8870; or by email at jmcsurdy@andoverma.gov.

Sincerely,

James McSurdy
WTP Superintendent

cc: Andrew Flanagan, Town Manager
Christopher Cronin, Director Municipal Services

APPENDIX IV

Notice of Intent Instructions and Suggested Notice of Intent Format

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

Request for General Permit Authorization to Discharge Wastewater
Notice of Intent (NOI) to be covered by the General Permit

Potable Water Treatment Facility (PWTF)
NPDES General Permit No. MAG640000 and NHG640000

I. Notice of Intent (NOI) Instructions

In order to be covered by the Potable Water Treatment Facility General Permit (PWTF GP), applicants must submit a completed NOI to EPA and the appropriate state agency. Please note that **only** facilities in Massachusetts that were previously unpermitted and discharge to an Outstanding Resource Water (ORW) or High Quality Water must submit an NOI to MassDEP.[1] The NOI consists of either the suggested NOI format included in Part III of this Appendix or another format of official correspondence that contains all of the required information listed in the General Permit and the NOI instructions. All NOIs submitted after December 21, 2020 must be submitted electronically.

At a minimum, the NOI must include the following information for each individual facility. Additional sheets may be attached as needed.

A. General Facility Information

1) Indicate whether applying for MA or NH PWTF General Permit.

2) Provide the name and location address of the facility, including the latitude and longitude. Also provide the Standard Industrial Classification (SIC Code(s)) and type of business. One online source to determine the latitude/longitude can be located at http://itouchmap.com/latlong.html

3) Provide the mailing address, if different from the location address.

[1] These waters are included in the Tables and Figures section of the MA Surface Water Quality Standards, available at http://www.mass.gov/eea/docs/dep/water/laws/i-thru-z/tblfig.pdf. Specifically, all official ORWs are listed in 314 CMR 4.06.

4) Provide the legal name, address, telephone, fax number, and e-mail of the owner of the facility. Indicate whether the owner is a Federal, State, Tribal, private or other entity.

5) Provide the name, address, telephone, fax number, and e-mail of the facility operator (if different from the owner).

6) Provide the answer to the following questions regarding the applicant's current permit status.

   Is the applicant currently (administratively) covered under the expired PWTF GP?

   i. Has a prior NPDES permit (either individual or general permit) been granted for this discharge? If yes, provide the permit number:
   ii. Is the discharge a "new discharger" as defined by 40 CFR Section 122.22?
   iii. Is the facility covered by an individual NPDES permit for *other* discharges? If yes, provide the permit number.
   iv. Is there a pending NPDES application on file with EPA for this discharge? If yes, indicate the date of submittal and permit number (if available)

7) Provide a topographic map indicating the location(s) of the facility and receiving water, and discharge point(s). Check the box to indicate a map has been submitted with NOI.

B. Discharge information

1) Provide the name and type of the receiving water(s) into which each outfall will discharge and identify if it is freshwater or marine water and its state water quality classification.

2) Indicate the frequency of the discharge (i.e., emergency only, infrequent (i.e., once/twice a year), intermittent (occurs sometimes but not regularly, as in batch discharges), continuous, or other). If Intermittent or Other, provide number of days/year the discharge occurs.

3) Describe the activity/activities that generate the discharge(s) to be covered by the permit. Include process discharges not specifically authorized in the PWTF GP which need to be authorized for the 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, include the number and size of lagoons; Size and elevation of entry pipe; time of travel from entry point of the discharge into the lagoon to the entry point to the receiving water; and the length of backwash cycle for any combination of number of filters.)

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

outfalls, and receiving water(s). Click box to indicate that line drawing/flow diagram has been attached to NOI.

5) Identify the source of the water (i.e., surface water, groundwater).

6) Provide the number of outfalls; and for each outfall, provide the latitude and 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.

C. Effluent Characteristics

1) List any water additives/chemicals used at the facility. This includes chemicals for pH adjustment, dechlorination, control of biological growth, control of corrosion and scale in water pipes, etc. Attach additional information on separate sheets.

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

3) Indicate if any aluminum-containing coagulants are used at the facility. If a facility adds an aluminum-containing chemical to the water being treated and/or discharged AND the facility was *not* covered under the PWTF GP that expired on 10/2/14, additional monitoring data is required. Facility must also complete Item III.C.12.

4) Indicate if the facility uses any alum-based products for algae control. If a facility adds an aluminum-containing chemical to the water being treated and/or discharged AND the facility was *not* covered under the PWTF GP that expired on 10/2/14, additional monitoring data is required. Facility must also complete Item III.C.12.

5) Indicate if any iron-based coagulants are used at the facility.

6) Indicate if the facility's discharge contains residual chlorine.

7) Indicate if the facility provides treatment to remove arsenic from the raw water source.

8) a) Indicate whether any phosphorus-containing chemicals are added to the treated water at this facility?
b) If answer to 8.a. is Yes, indicate whether the facility discharges to a waterbody impaired (i.e., listed as Category 4b or Category 5 on Integrated List of Waters for the relevant state pursuant to CWA section 303(d) and 305(b)) for (total) phosphorus or nutrient/eutrophication biological indicators (in MA) or chlorophyll-a, cyanobacteria hepatotoxic microsystins, dissolved oxygen (saturation), excess algal growth, invasive aquatic algae, or (total) phosphorus (in NH). The 2014 EPA-approved MA Integrated List

of Waters is available at:
http://www.mass.gov/eea/docs/dep/water/resources/07v5/14list2.pdf . Additional information for MA may be found at:
http://www.mass.gov/eea/agencies/massdep/water/watersheds/total-maximum-daily-loads-tmdls.html.
For facilities in NH, comparable information can be found at:
http://des.nh.gov/organization/divisions/water/wmb/swqa/2012/ .
c) If answer to 8.b. is Yes, provide the name of impaired waterbody and the pollutant it is impaired for: _____

9) Indicate if the facility removes radium or other radioactive substances from raw water sources to comply with drinking water standards.

10) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water (in 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 before submitting the NOI. For facilities that discharge in Massachusetts, it is highly recommended to contact the relevant state agency (MassDEP) to determine and/or confirm the 7Q10 and/or dilution factor.*** Also, 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 requested data. If the data is not available for a facility (e.g., a Category I facility that only discharges on an emergency basis), please mark "N/A".

a) Provide the Design Flow of the facility (in MGD, million gallons per day). This value will determine the facility's daily maximum flow limit, up to a maximum of 1.0 MGD.

b) Estimate the flow in GPD – both the maximum daily and average flow rate of the discharge in gallons per day;

c) Provide the maximum daily and average monthly flow concentration of TSS (mg/l). Facilities must use a minimum of 10 data points for this parameter. However, the most recent existing data (for facilities already submitting DMRs) may be used.

d) Provide the maximum and minimum monthly pH of discharge (in s.u.). Facilities must use a minimum of 10 data points for this parameter. However, the most recent existing data (for facilities already submitting DMRs) may be used;

e) For discharges which have been previously chlorinated or contain residual chlorine, provide the maximum daily concentration of TRC in ug/l. Facilities must use a minimum of 10 data points for this parameter. However, the most recent existing data (for facilities already submitting DMRs) may be used.

12) For a facility that uses an aluminum-containing chemical during treatment AND was *not* covered under the PWTF GP that expired on 10/2/14, additional monitoring data and information is required. The results of 12 effluent samples and 10 ambient (upstream) surface water samples must be collected, analyzed, and submitted. Additional requirements regarding such sampling can be found in Section III.C.12 of this Appendix. For relevant facilities in both Massachusetts and New Hampshire, each sample should be analyzed for total recoverable Al in micrograms per liter. For New Hampshire facilities, the assumption will be made that the entire fraction of measured total recoverable aluminum is in the acid soluble form. All laboratory results shall be submitted on a separate sheet. Also, the facility must 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.

D. Determination of Endangered Species Act Eligibility (ESA)

Provide documentation of ESA eligibility and respond to all questions as required in Appendix III.

E. Documentation of National Historic Preservation Act (NHPA) Requirements

Provide documentation and respond to all questions as required in Appendix II.

F. Supplemental Information

Applicants should provide any supplemental information needed to meet the requirements of the permit, including any analytical data used to support the application and any certification(s) required by the 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.

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.

H. *"Opt-Out" Request*

As stated in Section 5.1 of the General Permit, all permittees shall submit DMRs and reports required under the PWTF GP electronically to EPA using NetDMR by December 21, 2016 *unless* the facility has applied for an "opt-out request" and received written approval by EPA. A facility may apply for an "opt-out request" only if they are able to demonstrate a reasonable basis, which would include limiting factors like technical or administrative infeasibility (e.g., do not have a computer or internet access).

If a facility is applying for an "opt-out request," the box in Section H must be checked and a written description of the factors supporting the request must be provided. If a facility is *not* applying for an "opt-out request" (which will be the case for most facilities), simply leave this section blank.

II. Submission of NOI

A. Filing with EPA – All operators located in Massachusetts and New Hampshire that apply for coverage under this General Permit must submit an NOI to EPA-Region I. The completed, signed NOI formats and attachments must be submitted to EPA-Region I.

Electronically at: pwtf.generalpermit@epa.gov, or

Mailed to:

US EPA, Region 1
Office of Ecosystem Protection
PWTF GP Applications Coordinator (OEP06-4)
5 Post Office Square, Suite 100
Boston, MA 02109-3912

All NOIs must be submitted electronically after December 21, 2020.

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 Andover Water Treatment Plant

Street/PO Box 397 Lowell Street City Andover

State Massachusetts Zip Code 01810

Latitude 42.64446 Longitude -71.19624

SIC Code(s) 4941

Type of Business Drinking Water Treatment Facility

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

Facility Name _____

Street/PO Box _____ City _____

State _____ Zip Code _____

4. *Facility Owner:*
Legal Name: Town of Andover

Email aflanagan@andoverma.gov

Street/PO Box: 36 Bartlet Street City Andover

State Massachusetts Zip Code 01810

Contact Person Andrew Flanagan Tel # (978) 623-8210

Owner is (check one): Federal_____State_____Tribal_____Private _____

Other (describe)
Municipality

5. *Facility Operator (if different from above):*
Legal Name Town of Andover Department of Public Works, Water Treatment Plant

Email dpw-treatment@andoverma.gov

Street/PO Box 397 Lowell Street City Andover

State Massachusetts Zip Code 01810

Contact Person James McSurdy Tel # 978-623-8870

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 MAG640058

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.* **See Attachment A for Topographic Map**

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

1. *Name of receiving water into which discharge will occur*: Haggetts Pond

Check Appropriate Box: Freshwater ~~Marine Water~~

2. State Water Quality Classification Class A

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

3. *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: Backwash discharges to Haggetts Pond occur on a daily basis, with an average of two per day during normal operation of the water treatment plant. The number of backwashes required per day increases during the high water demand season, and therefore the number of backwash cycles performed each day are "spaced-out" so that an average of six backwashes per day are conducted to avoid exceeding the flow limitation in the permit. Each backwash cycle uses approximately 133,000 gallons of water.

4. 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 B.

5. 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? **Yes, See Attachment C.**

6. Identify the source of the water being discharged:

Surface water ~~Groundwater~~ ~~Other (describe)~~

7. Number of Outfalls 1

Latitude and Longitude to the nearest second for each Outfall. Attach additional pages if necessary.

Outfall # 1 Latitude 42.64465 Longitude -71.19763

Outfall # Latitude_____ Longitude_____

Outfall # Latitude_____ Longitude_____

8. 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 # 1: Laboratory staff collect backwash discharges samples to monitor effluent characteristics. Composite samples are collected weekly from an access manhole for the backwash discharge line just prior to where the effluent enters Haggetts Pond (the "receiving water"). Composite samples consist of four grab samples collected at approximately equal intervals on a flow weighted basis during the time when discharge is entering the receiving water after the start of the backwash cycle. The timing of the grab samples for pH and total residual chlorine corresponds to the timing of the composite sampling for the other parameters.

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.

See Attachment D.

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

None.

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 (cfs). Discharge is to a reservoir. The aluminum dilution factor is 135:1 and the chlorine dilution factor is 10:1.

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):* 24
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 892,000 GPD Average Monthly Flow 380,000 GPD

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

Maximum Daily: 36 mg/l Average Monthly: 22 mg/l

d) *pH (s.u.)* : Number of samples: 10 (Minimum of 10 samples)
Minimum: 6.52 s.u. Maximum: 6.67 s.u.

e) *Total Residual Chlorine (ug/l)*: Number of samples: 10 (Minimum of 10 samples)
Maximum Daily: 250 ug/l
NOTE: TRC is only required for discharges which have been previously chlorinated or contain residual chlorine

See Attachment E for previous 10 months DMR submittals.

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)

_____

_____

_____

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? See answer for "2." Below.

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?

   NA. See Attachment F.
   The proposed activities do not include (1) tree removal (i.e. cutting down, harvesting, destroying, trimming, or manipulating in any other way the trees, saplings, snags, or any other form of woody vegetation likely to be used by northern long-eared bats), and (2) do not take place within Northern Long-Eared bat (NLEB) hibernacula, and are therefore not prohibited under the USFWS Northern Long-eared bat 4(d) Rule. A permit from the USFWS is not necessary. Per the 4(d) Rule, the applicant may proceed with the activity, and does not need to contact the USFWS.

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

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? _____**

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 anti-degradation 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 June 1, 2017

Printed Name and Title Andrew Flanagan, Town Manager

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.)

_____

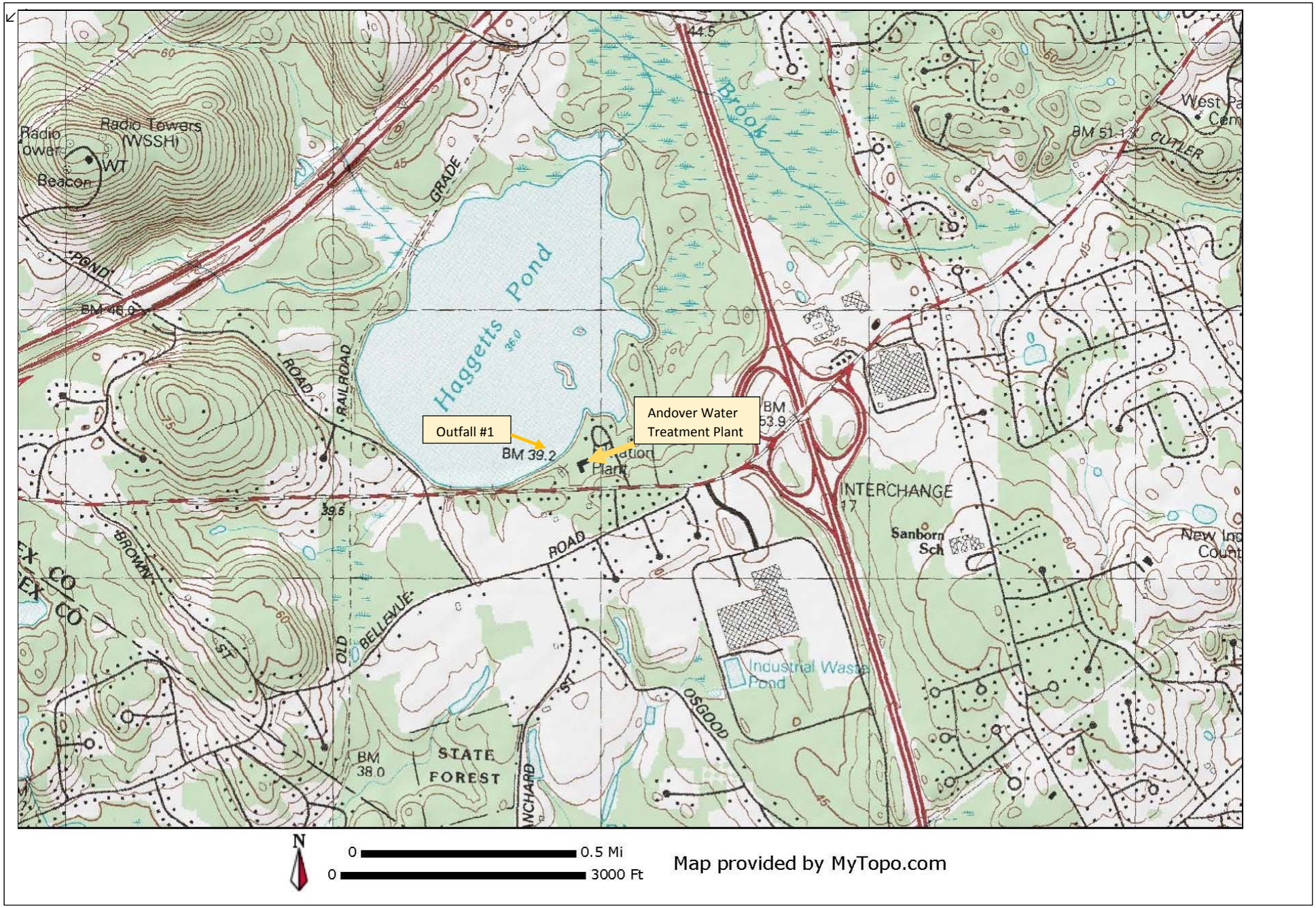
_____

_____

Attachment A

Topographic Map of Andover Water Treatment Plant,

Effluent Discharge Outfall, and Receiving Water Locations



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Map provided by MyTopo.com

Attachment B
Description of Discharge Activities

Intake, Screening and Pumping

Raw water obtained from Haggetts Pond reservoir is pumped into the Andover Water Treatment Plant through a 36-inch diameter pipe after passing through two traveling water screens. After leaving the low lift pump room, normal operation is that all raw water enters the ozone contactors, after being metered in the raw water venturi meter. Pretreatment provisions are made to apply powdered activated carbon slurry. Raw water is continually pumped to the laboratory for monitoring quality.

Pretreatment

Upon leaving the ozone building, flow is hydraulically split to eight pretreatment units that consist of one carbon contact chamber, two rapid mix basins, two flocculators, and one double tray sedimentation basin. Each rapid mix basin and flocculation basin is equipped with mixers to ensure uniform distribution of raw water and chemical coagulant: aluminum sulfate. Gentle agitation allows suspended particles and collected material to generate a settable floc. Flocculated water flows to its corresponding double-floored sedimentation basin that provides quiescent conditions required to settle out floc from the treated water. A collection mechanism along the sedimentation basin floor pushes settled floc to sumps. Sludge is drawn from these sumps and discharged into holding tanks and pumped to a wastewater treatment plant.

Filtration

Clarified water leaving the sedimentation basins is distributed to eight granular activated carbon filters where particles too light to be removed in the pretreatment units will be removed by filtration. Clarified water is applied to the top of the filter and flows by gravity down through the media. An underdrainage system beneath the media collects the filtered water and conveys it to a finish water clearwell. Finish water is stored in the clearwell before being pumped to the distribution system. The pH of the clearwell water is adjusted with sodium hydroxide, disinfected with sodium hypochlorite, and fluoride applied as hydrofluorosilicic acid. As the filters are used, foreign material filtered from the water accumulates and clogs the filter media, which requires them to be periodically cleaned by backwashing.

Backwashing

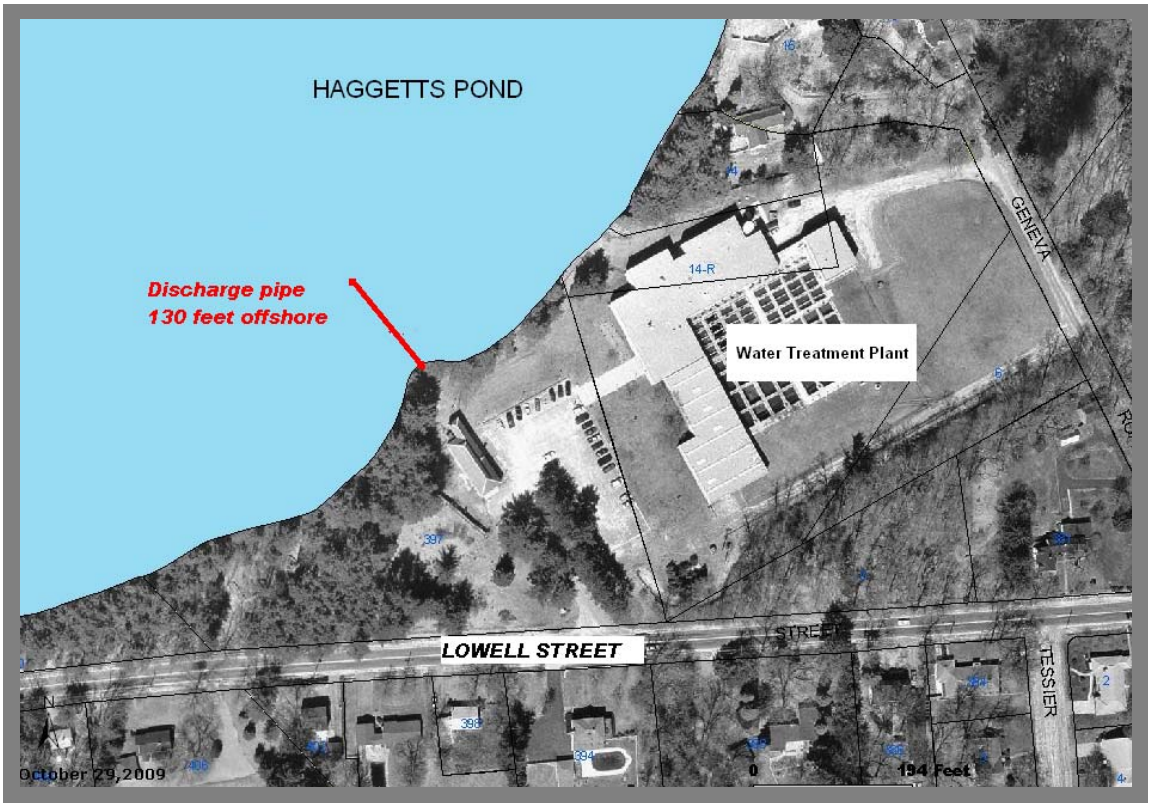
The backwash system uses pumps to withdraw clean water from the clearwell. Clean water flows up through the filter media at three controlled flows (low, high, low), and with the help of surface wash water, dislodges the collected matter, leaving the filter media clean. During the backwashing process, turbidity and flow are continually monitored. The dirty wash water is collected in filter troughs, carried through the drain channel and directed to be discharged to Haggetts Pond reservoir through a 14-inch drain pipe. The discharge exits the drain pipe 130 feet from the shore of Haggetts Pond at approximately 7 feet below the water surface. Page 3 of Attachment A contains a pictorial of the discharge location with map coordinates.

Monitoring NPDES discharge

The laboratory staff collects discharge samples to monitor effluent characteristics. Composite samples are collected weekly from an access manhole for the backwash discharge line just prior to where the effluent enters Haggetts Pond (the “receiving water”). Composite samples consist of four grab samples collected at approximately equal intervals on a flow weighted basis during the time when discharge is entering the receiving water after the start of the backwash cycle. The timing of the grab samples for pH and total residual chlorine corresponds to the timing of the composite sampling for the other parameters. All samples are collected and analyzed by in-house water treatment plant laboratory staff for the following parameters: total suspended solids (TSS), pH, total chlorine residual, turbidity, and aluminum, which is sent to Eaton Analytical. Data regarding the backwash flow rate, filter number, service hours, loss of head, as well as gallons filtered and discharged are recorded by the facility supervisory control and data acquisition (SCADA) system. Pages 4, 5 and 6 of Attachment A illustrate SCADA system control of filter backwashing operations.

Discharge Location

AERIAL PHOTO



PIPE COORDINATES (SHORELINE)

LATITUDE: 42.64436

LONGITUDE: -71.19734

STATE PLANE COORDINATES – NAD83 FEET

NORTHING: 737599.49, EASTING: 3059990.59

PIPE COORDINATES (END OF PIPE)

LATITUDE: 42.64465

LONGITUDE: -71.19763

STATE PLANE COORDINATES – NAD83 FEET

NORTHING: 737521.53, EASTING: 3060095.08

FILTER 5 BACKWASH SETPOINTS

START BACKWASH

BACKWASH AVAILABLE

■ = AUTO
■ = MANUAL

FILTER 1 BW AUTO	■
FILTER 2 BW AUTO	■
FILTER 3 BW AUTO	■
FILTER 4 BW AUTO	■
FILTER 5 BW AUTO	■
FILTER 6 BW AUTO	■
FILTER 7 BW AUTO	■
FILTER 8 BW AUTO	■

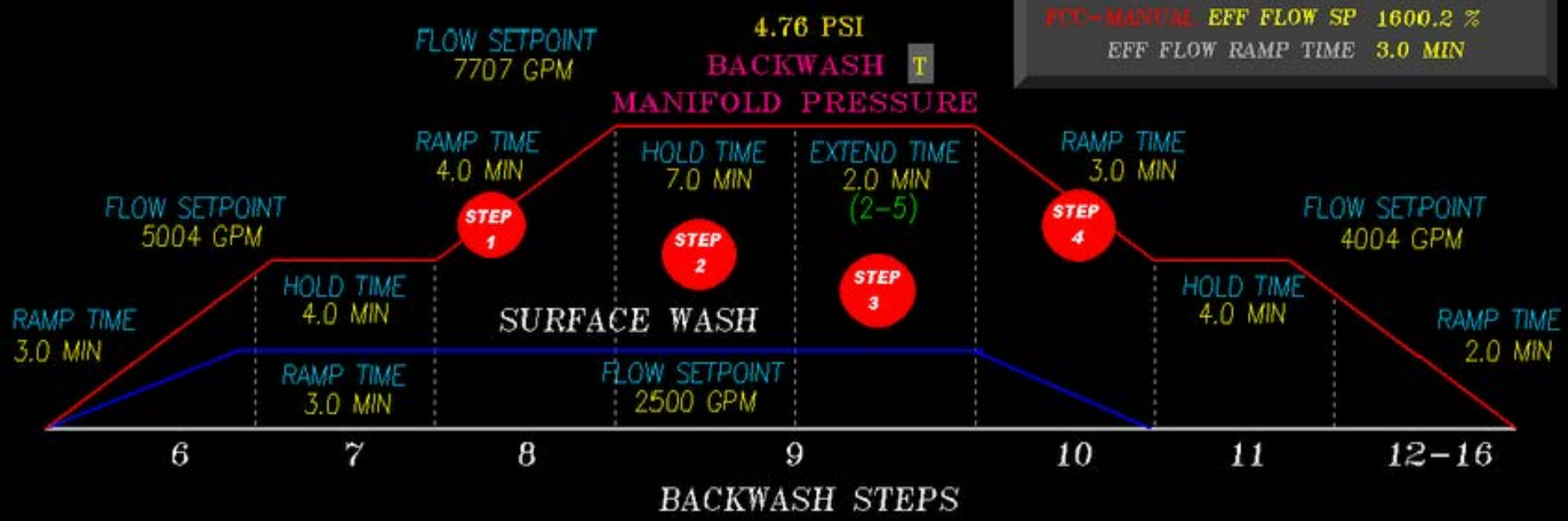
BACKWASH MODE	AUTO
BACKWASH STEP	0
TIME REMAINING IN STEP	0.00 MINUTES
BACKWASH FLOW SETPOINT	0 GPM
BACKWASH FLOW	0 GPM
SURFACE WASH FLOW SETPOINT	2500 GPM
SURFACE WASH FLOW	0 GPM
HIGH WASH EXTEND TIME	2.0 MINUTES
DRAWDOWN EFFLUENT SETPOINT	1.40 MGD
ACTUAL EFFLUENT SETPOINT	0.00 MGD
DRAWDOWN TIMEOUT SETPOINT	4.0 MIN

BACKWASH FLOW CONTROL

BKWASH START LOCATION		SOC
HIGH WASH SP SOURCE		SOC-AUTO
SOC-AUTO	HI WASH SP	7707 GPM
SOC-MANUAL	HI WASH SP	60.0 %
FCC-AUTO	HI WASH SP	240037 GPM
FCC-MANUAL	HI WASH SP	3.9 %

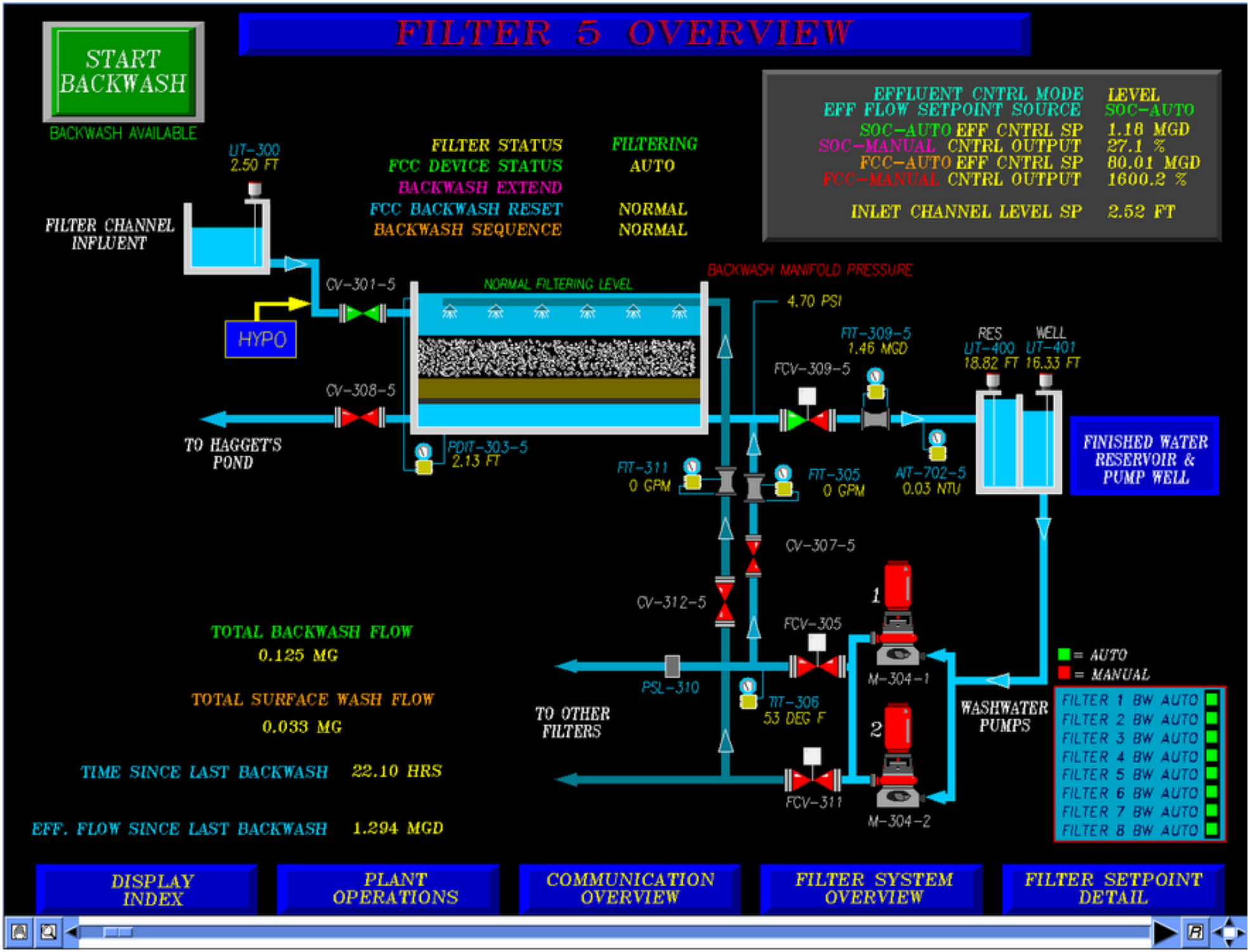
EFFLUENT FLOW CONTROL

EFF FLOW SP SOURCE		SOC-AUTO
SOC-AUTO	EFF FLOW SP	1.16 MGD
SOC-MANUAL	EFF FLOW SP	27.11 %
FCC-AUTO	EFF FLOW SP	60.01 MGD
FCC-MANUAL	EFF FLOW SP	1600.2 %
EFF FLOW RAMP TIME		3.0 MIN



DISPLAY INDEX | PLANT OVERVIEW | PLANT OPERATIONS | FILTER SYSTEM OVERVIEW | FILTER 5 OVERVIEW


File Edit Curve Options
Help
Pan/Zoom Select: 1 2 3 4 5 6
legend
Detail
1-BACKWASH_PSI
2-30MINS_1SEC DATA
3-FILTER IN BW MODE
4-BACK WASH FLOW
5-SURFACE WASH FLOW
6-WASH WATER TEMP
Curve Values at Click Point
Description X-axis Y-axis
1 BACKWASH_PSI 10-NOV-2009 11:34:40 7.048
2 30MINS_1SEC DATA 12-NOV-2009 10:39:20 4.708
3 FILTER IN BW MODE 10-NOV-2009 11:34:40 FLTR5 U
4 BACK WASH FLOW 10-NOV-2009 11:34:40 7755.005
5 SURFACE WASH FLOW 10-NOV-2009 11:34:40 2504.641
6 WASH WATER TEMP 10-NOV-2009 11:34:40 52.121
Dismiss
UPD
FLT708
FLTR6
FLTR5
FLTR4
FLTR3
FLTR2
FLTR1
NONE


FILTER 5 OVERVIEW
START BACKWASH
BACKWASH AVAILABLE
FILTER STATUS FILTERING
FCC DEVICE STATUS AUTO
BACKWASH EXTEND
FCC BACKWASH RESET NORMAL
BACKWASH SEQUENCE NORMAL
EFFLUENT CNTRL MODE LEVEL
EFF FLOW SETPOINT SOURCE SOC-AUTO
SOC-AUTO EFF CNTRL SP 1.18 MGD
SOC-MANUAL CNTRL OUTPUT 27.1 %
FCC-AUTO EFF CNTRL SP 80.01 MGD
FCC-MANUAL CNTRL OUTPUT 1600.2 %
INLET CHANNEL LEVEL SP 2.52 FT
LIT-300 2.50 FT
FILTER CHANNEL INFLUENT
HYPO
CV-301-5
NORMAL FILTERING LEVEL
BACKWASH MANIFOLD PRESSURE
4.70 PSI
FIT-309-5 1.46 MGD
FCV-309-5
RES LIT-400 18.82 FT
WELL LIT-401 16.33 FT
CV-308-5
TO HAGGETS POND
PDIT-303-5 2.13 FT
FIT-311 0 GPM
FIT-305 0 GPM
AIT-702-5 0.03 NTU
FINISHED WATER RESERVOIR & PUMP WELL
CV-307-5
CV-312-5
FCV-305
PSL-310
TIT-306 53 DEG F
TO OTHER FILTERS
M-304-1
M-304-2
FCV-311
WASHWATER PUMPS
= AUTO
= MANUAL
FILTER 1 BW AUTO
FILTER 2 BW AUTO
FILTER 3 BW AUTO
FILTER 4 BW AUTO
FILTER 5 BW AUTO
FILTER 6 BW AUTO
FILTER 7 BW AUTO
FILTER 8 BW AUTO
TOTAL BACKWASH FLOW
0.125 MG
TOTAL SURFACE WASH FLOW
0.033 MG
TIME SINCE LAST BACKWASH 22.10 HRS
EFF. FLOW SINCE LAST BACKWASH 1.294 MGD
DISPLAY INDEX
PLANT OPERATIONS
COMMUNICATION OVERVIEW
FILTER SYSTEM OVERVIEW
FILTER SETPOINT DETAIL

Attachment C

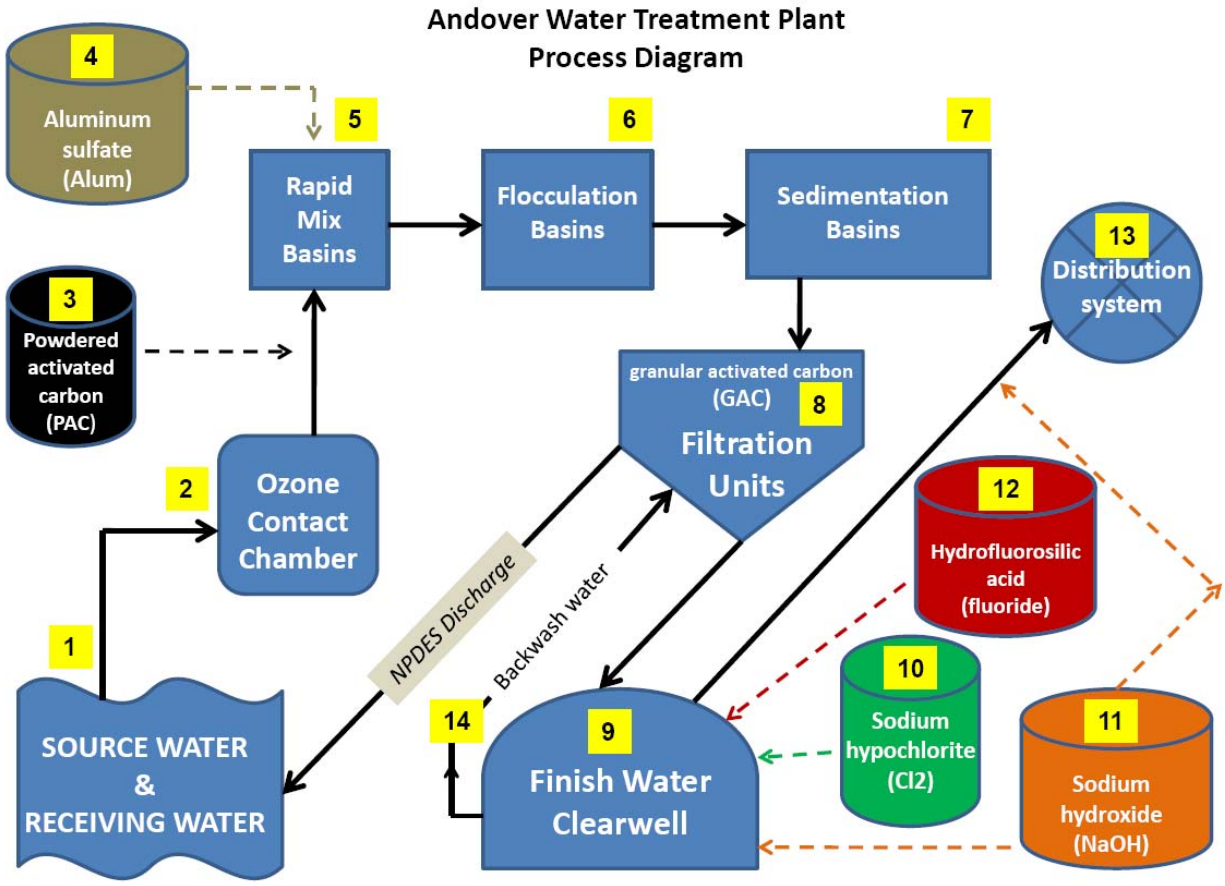


Diagram Description

The Andover Water Treatment Plant withdraws source water from **1** Haggetts Pond and pumps it to the ozone facility **2** where raw water is ozonated. **3** Powdered activated carbon is added before the process flow continues on to the **5** rapid mix and **6** flocculation basins to mix with **4** aluminum sulfate (alum). Chemically treated water then travels to the **7** sedimentation basins and **8** filter units where water passes through granular activated carbon (GAC) media. Filtered water is stored in a **9** clearwell and disinfected with **10** sodium hypochlorite (chlorine) and the pH is adjusted with **11** sodium hydroxide. Finished water is treated with **12** fluoride and the pH adjusted once again before being pumped to the **13** distribution system. Reversing the flow of the clearwell water **14** through the filtration units utilizing backwash pumps cleans the filters. The backwash water exits the filter via troughs and out a 30-inch drain from the plant to **1** Haggetts Pond, the receiving water.

Attachment D
Effluent Characteristics - List of Water Additives

Ozone

CAS#: 010028-15-6

The use of ozone in the pretreatment of raw water oxidizes organic material which aids in the overall treatment process by removing tastes and odors, reducing the coagulant dosage required, reducing the average effluent turbidity, increasing filter runs, and reducing the formation of disinfection byproducts.

Normal Dosage Range: 1.5 – 2.5 ppm

Powdered activated carbon

CAS#: 7440-44-0

Powdered activated carbon (PAC) is used to remove the dissolved organic materials that cause objectionable taste, odor, and color from the raw water.

Normal Dosage Range: 1.5 – 3.0 ppm

Aluminum sulfate

CAS#: 010043-01-3

Aluminum sulfate (alum) is used to coagulate suspended and colloidal matter in the raw water, forming a floc heavy enough to settle out. This pretreatment greatly reduces the amount of material the filters must remove and also increases the size of particles that otherwise might not be filterable.

Normal Dosage Range: 24 – 30 ppm

Sodium hydroxide

CAS#: 001310-73-2

Sodium hydroxide (NaOH), also known as caustic soda, is used for pH adjustment and corrosion control.

Normal Dosage Range: 13 – 18 ppm

Sodium hypochlorite

CAS#: 007681-52-9

Sodium hypochlorite (NaOCl) provides for disinfection of the finished water. Chlorine destroys pathogenic microorganisms, oxidizes undesirable elements, and reduces some tastes and odors.

Normal Dosage Range: 1.5 – 2.2 ppm

Hydrofluorosilicic acid

CAS#: 16961-83-4

Hydrofluorosilicic acid (fluoride) is added to the drinking water for the purpose of reducing tooth decay, particularly in children.

Normal Dosage Range: 0.6 – 0.7 ppm

Attachment E

DMR Data

July 2016 - April 2017

Permit

Permit ID:	MAG640058	**Major:**	☐
Permittee:	ANDOVER WTP	**Permittee Address:**	DEPT OF PUBLIC WORKS ANDOVER , MA01810
Facility:	ANDOVER WATER TREATMENT PLANT	**Facility Location:**	397 LOWELL STREET ANDOVER , MA01810
Permitted Feature:	001 - External Outfall	**Discharge:**	001-A - BACKWASH DISCHARGE

Report Dates & Status

Monitoring Period:	From 07/01/16 to 07/31/16	**DMR Due Date:**	10/15/16
Status:	**NetDMR Validated**		

Considerations for Form Completion

Principal Executive Officer

First Name:	Alan	**Last Name:**	Carifio
Title:	Chemist	**Telephone:**	978-623-8350

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Parameter Name	NODI	Quantity or Loading Value 1	Quantity or Loading Value 2	Quantity or Loading Units	Quality or Concentration Value 1	Quality or Concentration Value 2	Quality or Concentration Value 3	Quality or Concentration Units	# of Ex.	Freq. of Analysis	Smpl. Type
00400	pH	Smpl.				=6.59		=6.61	12 - SU	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				>=6.5 MINIMUM		<=8.3 MAXIMUM	12 - SU		01/07 - Weekly	GR - GRAB
NODI: -		NODI										
00530	Solids, total suspended	Smpl.				=20		=27	19 - mg/L	0	01/07 - Weekly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.				<=30 MO AVG		<=50 DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
NODI: -		NODI										
01104	Aluminum, total recoverable	Smpl.						=3500	28 - ug/L	0	01/30 - Monthly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.						Req Mon DAILY MX	28 - ug/L		01/30 - Monthly	CP - COMPOS
NODI: -		NODI										
50050	Flow, in conduit or thru treatment plant	Smpl.	=0.657	=0.892	03 - MGD					0	01/07 - Weekly	TM - TOTALZ
1 - Effluent Gross												
Season: 0		Req.	Req Mon MO AVG	<=1 DAILY MX	03 - MGD						01/07 - Weekly	TM - TOTALZ
NODI: -		NODI										
X 50060	Chlorine, total residual	Smpl.				=140		=160	28 - ug/L	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				<=110 MO AVG		<=190 DAILY MX	28 - ug/L		01/07 - Weekly	GR - GRAB
NODI: -		NODI										

Permit

Permit ID:	MAG640058	**Major:**	☐
Permittee:	ANDOVER WTP	**Permittee Address:**	DEPT OF PUBLIC WORKS ANDOVER , MA01810
Facility:	ANDOVER WATER TREATMENT PLANT	**Facility Location:**	397 LOWELL STREET ANDOVER , MA01810
Permitted Feature:	001 - External Outfall	**Discharge:**	001-A - BACKWASH DISCHARGE

Report Dates & Status

Monitoring Period:	From 08/01/16 to 08/31/16	**DMR Due Date:**	10/15/16
Status:	**NetDMR Validated**		

Considerations for Form Completion

Principal Executive Officer

First Name:	alan	**Last Name:**	carifio
Title:	chemist	**Telephone:**	978-623-8350

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Parameter Name	NODI	Quantity or Loading Value 1	Quantity or Loading Value 2	Quantity or Loading Units	Quality or Concentration Value 1	Quality or Concentration Value 2	Quality or Concentration Value 3	Quality or Concentration Units	# of Ex.	Freq. of Analysis	Smpl. Type
00400	pH											
1 - Effluent Gross		Smpl.				=6.58		=6.64	12 - SU	0	01/07 - Weekly	GR - GRAB
Season: 0		Req.				>=6.5 MINIMUM		<=8.3 MAXIMUM	12 - SU		01/07 - Weekly	GR - GRAB
NODI: -		NODI										
00530	Solids, total suspended											
1 - Effluent Gross		Smpl.				=17		=20	19 - mg/L	0	01/07 - Weekly	CP - COMPOS
Season: 0		Req.				<=30 MO AVG		<=50 DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
NODI: -		NODI										
01104	Aluminum, total recoverable											
1 - Effluent Gross		Smpl.						=4000	28 - ug/L	0	01/30 - Monthly	CP - COMPOS
Season: 0		Req.						Req Mon DAILY MX	28 - ug/L		01/30 - Monthly	CP - COMPOS
NODI: -		NODI										
50050	Flow, in conduit or thru treatment plant											
1 - Effluent Gross		Smpl.	=0.634	=0.825	03 - MGD					0	01/07 - Weekly	TM - TOTALZ
Season: 0		Req.	Req Mon MO AVG	<=1 DAILY MX	03 - MGD						01/07 - Weekly	TM - TOTALZ
NODI: -		NODI										
X 50060	Chlorine, total residual											
1 - Effluent Gross		Smpl.				=190		=250	28 - ug/L	0	01/07 - Weekly	GR - GRAB
Season: 0		Req.				<=110 MO AVG		<=190 DAILY MX	28 - ug/L		01/07 - Weekly	GR - GRAB
NODI: -		NODI										

Permit

Permit ID:	MAG640058	**Major:**	☐
Permittee:	ANDOVER WTP	**Permittee Address:**	DEPT OF PUBLIC WORKS ANDOVER , MA01810
Facility:	ANDOVER WATER TREATMENT PLANT	**Facility Location:**	397 LOWELL STREET ANDOVER , MA01810
Permitted Feature:	001 - External Outfall	**Discharge:**	001-A - BACKWASH DISCHARGE

Report Dates & Status

Monitoring Period:	From 09/01/16 to 09/30/16	**DMR Due Date:**	10/15/16
Status:	**NetDMR Validated**		

Considerations for Form Completion

Principal Executive Officer

First Name:	Alan	**Last Name:**	Carifio
Title:	Chemist	**Telephone:**	978-623-8350

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Parameter Name	NODI	Quantity or Loading Value 1	Quantity or Loading Value 2	Units	Quality or Concentration Value 1	Quality or Concentration Value 2	Quality or Concentration Value 3	Units	# of Ex.	Freq. of Analysis	Smpl. Type
00400	pH	Smpl.				=6.6		=6.67	12 - SU	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				>=6.5 MINIMUM		<=8.3 MAXIMUM	12 - SU		01/07 - Weekly	GR - GRAB
NODI: -		NODI										
00530	Solids, total suspended	Smpl.				=16		=21	19 - mg/L	0	01/07 - Weekly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.				<=30 MO AVG		<=50 DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
NODI: -		NODI										
01104	Aluminum, total recoverable	Smpl.						=4700	28 - ug/L	0	01/30 - Monthly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.						Req Mon DAILY MX	28 - ug/L		01/30 - Monthly	CP - COMPOS
NODI: -		NODI										
50050	Flow, in conduit or thru treatment plant	Smpl.	=0.537	=0.727	03 - MGD					0	01/07 - Weekly	TM - TOTALZ
1 - Effluent Gross												
Season: 0		Req.	Req Mon MO AVG	<=1 DAILY MX	03 - MGD						01/07 - Weekly	TM - TOTALZ
NODI: -		NODI										
X 50060	Chlorine, total residual	Smpl.				=165		=200	28 - ug/L	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				<=110 MO AVG		<=190 DAILY MX	28 - ug/L		01/07 - Weekly	GR - GRAB
NODI: -		NODI										

Permit

Permit ID:	MAG640058	**Major:**	☐
Permittee:	ANDOVER WTP	**Permittee Address:**	DEPT OF PUBLIC WORKS ANDOVER , MA01810
Facility:	ANDOVER WATER TREATMENT PLANT	**Facility Location:**	397 LOWELL STREET ANDOVER , MA01810
Permitted Feature:	001 - External Outfall	**Discharge:**	001-A - BACKWASH DISCHARGE

Report Dates & Status

Monitoring Period:	From 10/01/16 to 10/31/16	**DMR Due Date:**	01/15/17
Status:	**NetDMR Validated**		

Considerations for Form Completion

Principal Executive Officer

First Name:	Alan	**Last Name:**	Carifio
Title:	Chemist	**Telephone:**	978-623-8350

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Parameter Name	NODI	Quantity or Loading Value 1	Quantity or Loading Value 2	Units	Quality or Concentration Value 1	Quality or Concentration Value 2	Quality or Concentration Value 3	Units	# of Ex.	Freq. of Analysis	Smpl. Type
00400	pH	Smpl.				=6.57		=6.67	12 - SU	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				>=6.5 MINIMUM		<=8.3 MAXIMUM	12 - SU		01/07 - Weekly	GR - GRAB
NODI: -		NODI										
00530	Solids, total suspended	Smpl.				=15		=26	19 - mg/L	0	01/07 - Weekly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.				<=30 MO AVG		<=50 DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
NODI: -		NODI										
01104	Aluminum, total recoverable	Smpl.						=2400	28 - ug/L	0	01/30 - Monthly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.						Req Mon DAILY MX	28 - ug/L		01/30 - Monthly	CP - COMPOS
NODI: -		NODI										
X 50050	Flow, in conduit or thru treatment plant	Smpl.	=0.364	=1.089	03 - MGD					1	01/07 - Weekly	TM - TOTALZ
1 - Effluent Gross												
Season: 0		Req.	Req Mon MO AVG	<=1 DAILY MX	03 - MGD						01/07 - Weekly	TM - TOTALZ
NODI: -		NODI										
50060	Chlorine, total residual	Smpl.				=80		=120	28 - ug/L	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				<=110 MO AVG		<=190 DAILY MX	28 - ug/L		01/07 - Weekly	GR - GRAB
NODI: -		NODI										

Permit

Permit ID:	MAG640058	**Major:**	☐
Permittee:	ANDOVER WTP	**Permittee Address:**	DEPT OF PUBLIC WORKS ANDOVER , MA01810
Facility:	ANDOVER WATER TREATMENT PLANT	**Facility Location:**	397 LOWELL STREET ANDOVER , MA01810
Permitted Feature:	001 - External Outfall	**Discharge:**	001-A - BACKWASH DISCHARGE

Report Dates & Status

Monitoring Period:	From 11/01/16 to 11/30/16	**DMR Due Date:**	01/15/17
Status:	**NetDMR Validated**		

Considerations for Form Completion

Principal Executive Officer

First Name:	Alan	**Last Name:**	Carifio
Title:	Chemist	**Telephone:**	978-623-8872

No Data Indicator (NODI)

Form NODI: -

Parameter	NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			
00400 pH	Smpl.				=6.54		=6.58	12 - SU	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross											
Season: 0	Req.				>=6.5 MINIMUM		<=8.3 MAXIMUM	12 - SU		01/07 - Weekly	GR - GRAB
NODI: -	NODI										
00530 Solids, total suspended	Smpl.				=20		=22	19 - mg/L	0	01/07 - Weekly	CP - COMPOS
1 - Effluent Gross											
Season: 0	Req.				<=30 MO AVG		<=50 DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
NODI: -	NODI										
01104 Aluminum, total recoverable	Smpl.						=6200	28 - ug/L	0	01/30 - Monthly	CP - COMPOS
1 - Effluent Gross											
Season: 0	Req.						Req Mon DAILY MX	28 - ug/L		01/30 - Monthly	CP - COMPOS
NODI: -	NODI										
50050 Flow, in conduit or thru treatment plant	Smpl.	=0.255	=0.305	03 - MGD					0	01/07 - Weekly	TM - TOTALZ
1 - Effluent Gross											
Season: 0	Req.	Req Mon MO AVG	<=1 DAILY MX	03 - MGD						01/07 - Weekly	TM - TOTALZ
NODI: -	NODI										
50060 Chlorine, total residual	Smpl.				=0.06		=0.07	28 - ug/L	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross											
Season: 0	Req.				<=110 MO AVG		<=190 DAILY MX	28 - ug/L		01/07 - Weekly	GR - GRAB
NODI: -	NODI										

Permit

Permit ID:	MAG640058	**Major:**	☐
Permittee:	ANDOVER WTP	**Permittee Address:**	DEPT OF PUBLIC WORKS ANDOVER , MA01810
Facility:	ANDOVER WATER TREATMENT PLANT	**Facility Location:**	397 LOWELL STREET ANDOVER , MA01810
Permitted Feature:	001 - External Outfall	**Discharge:**	001-A - BACKWASH DISCHARGE

Report Dates & Status

Monitoring Period:	From 12/01/16 to 12/31/16	**DMR Due Date:**	01/15/17
Status:	**NetDMR Validated**		

Considerations for Form Completion

Principal Executive Officer

First Name:	alan	**Last Name:**	carifio
Title:	chemist	**Telephone:**	978-623-8872

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Parameter Name	NODI	Quantity or Loading Value 1	Quantity or Loading Value 2	Units	Quality or Concentration Value 1	Quality or Concentration Value 2	Quality or Concentration Value 3	Units	# of Ex.	Freq. of Analysis	Smpl. Type
00400	pH	Smpl.				=6.53		=6.56	12 - SU	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				>=6.5 MINIMUM		<=8.3 MAXIMUM	12 - SU		01/07 - Weekly	GR - GRAB
NODI: -		NODI										
00530	Solids, total suspended	Smpl.				=27		=36	19 - mg/L	0	01/07 - Weekly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.				<=30 MO AVG		<=50 DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
NODI: -		NODI										
01104	Aluminum, total recoverable	Smpl.						=5700	28 - ug/L	0	01/30 - Monthly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.						Req Mon DAILY MX	28 - ug/L		01/30 - Monthly	CP - COMPOS
NODI: -		NODI										
50050	Flow, in conduit or thru treatment plant	Smpl.	=0.273	=0.396	03 - MGD					0	01/07 - Weekly	TM - TOTALZ
1 - Effluent Gross												
Season: 0		Req.	Req Mon MO AVG	<=1 DAILY MX	03 - MGD						01/07 - Weekly	TM - TOTALZ
NODI: -		NODI										
50060	Chlorine, total residual	Smpl.				=0.07		=0.08	28 - ug/L	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				<=110 MO AVG		<=190 DAILY MX	28 - ug/L		01/07 - Weekly	GR - GRAB
NODI: -		NODI										

Permit

Permit ID:	MAG640058	**Major:**	☐
Permittee:	ANDOVER WTP	**Permittee Address:**	DEPT OF PUBLIC WORKS ANDOVER , MA01810
Facility:	ANDOVER WATER TREATMENT PLANT	**Facility Location:**	397 LOWELL STREET ANDOVER , MA01810
Permitted Feature:	001 - External Outfall	**Discharge:**	001-A - BACKWASH DISCHARGE

Report Dates & Status

Monitoring Period:	From 01/01/17 to 01/31/17	**DMR Due Date:**	04/15/17
Status:	**NetDMR Validated**		

Considerations for Form Completion

Principal Executive Officer

First Name:	Alan	**Last Name:**	Carifio
Title:	Chemist	**Telephone:**	978-623-8872

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Parameter Name	NODI	Quantity or Loading Value 1	Quantity or Loading Value 2	Quantity or Loading Units	Quality or Concentration Value 1	Quality or Concentration Value 2	Quality or Concentration Value 3	Quality or Concentration Units	# of Ex.	Freq. of Analysis	Smpl. Type
00400	pH	Smpl.				=6.52		=6.58	12 - SU	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				>=6.5 MINIMUM		<=8.3 MAXIMUM	12 - SU		01/07 - Weekly	GR - GRAB
NODI: -		NODI										
00530	Solids, total suspended	Smpl.				=28		=34	19 - mg/L	0	01/07 - Weekly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.				<=30 MO AVG		<=50 DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
NODI: -		NODI										
01104	Aluminum, total recoverable	Smpl.						=4500	28 - ug/L	0	01/30 - Monthly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.						Req Mon DAILY MX	28 - ug/L		01/30 - Monthly	CP - COMPOS
NODI: -		NODI										
50050	Flow, in conduit or thru treatment plant	Smpl.	=0.26	=0.358	03 - MGD					0	01/07 - Weekly	TM - TOTALZ
1 - Effluent Gross												
Season: 0		Req.	Req Mon MO AVG	<=1 DAILY MX	03 - MGD						01/07 - Weekly	TM - TOTALZ
NODI: -		NODI										
50060	Chlorine, total residual	Smpl.				=90		=90	28 - ug/L	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				<=110 MO AVG		<=190 DAILY MX	28 - ug/L		01/07 - Weekly	GR - GRAB
NODI: -		NODI										

Permit

Permit ID:	MAG640058	**Major:**	☐
Permittee:	ANDOVER WTP	**Permittee Address:**	DEPT OF PUBLIC WORKS ANDOVER , MA01810
Facility:	ANDOVER WATER TREATMENT PLANT	**Facility Location:**	397 LOWELL STREET ANDOVER , MA01810
Permitted Feature:	001 - External Outfall	**Discharge:**	001-A - BACKWASH DISCHARGE

Report Dates & Status

Monitoring Period:	From 02/01/17 to 02/28/17	**DMR Due Date:**	04/15/17
Status:	**NetDMR Validated**		

Considerations for Form Completion

Principal Executive Officer

First Name:	Alan	**Last Name:**	Carifio
Title:	Chemist	**Telephone:**	978-623-8872

No Data Indicator (NODI)

Form NODI: -

Parameter		NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			
00400	pH	Smpl.				=6.58		=6.61	12 - SU	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				>=6.5 MINIMUM		<=8.3 MAXIMUM	12 - SU		01/07 - Weekly	GR - GRAB
NODI: -		NODI										
00530	Solids, total suspended	Smpl.				=27		=31	19 - mg/L	0	01/07 - Weekly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.				<=30 MO AVG		<=50 DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
NODI: -		NODI										
01104	Aluminum, total recoverable	Smpl.						=12000	28 - ug/L	0	01/30 - Monthly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.						Req Mon DAILY MX	28 - ug/L		01/30 - Monthly	CP - COMPOS
NODI: -		NODI										
50050	Flow, in conduit or thru treatment plant	Smpl.	=0.265	=0.298	03 - MGD					0	01/07 - Weekly	TM - TOTALZ
1 - Effluent Gross												
Season: 0		Req.	Req Mon MO AVG	<=1 DAILY MX	03 - MGD						01/07 - Weekly	TM - TOTALZ
NODI: -		NODI										
50060	Chlorine, total residual	Smpl.				=90		=100	28 - ug/L	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				<=110 MO AVG		<=190 DAILY MX	28 - ug/L		01/07 - Weekly	GR - GRAB
NODI: -		NODI										

Permit

Permit ID:	MAG640058	**Major:**	☐
Permittee:	ANDOVER WTP	**Permittee Address:**	DEPT OF PUBLIC WORKS ANDOVER , MA01810
Facility:	ANDOVER WATER TREATMENT PLANT	**Facility Location:**	397 LOWELL STREET ANDOVER , MA01810
Permitted Feature:	001 - External Outfall	**Discharge:**	001-A - BACKWASH DISCHARGE

Report Dates & Status

Monitoring Period:	From 03/01/17 to 03/31/17	**DMR Due Date:**	04/15/17
Status:	**NetDMR Validated**		

Considerations for Form Completion

Principal Executive Officer

First Name:	alan	**Last Name:**	carifio
Title:	chemist	**Telephone:**	978-623-8872

No Data Indicator (NODI)

Form NODI: -

Parameter		NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			
00400	pH	Smpl.				=6.53		=6.61	12 - SU	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				>=6.5 MINIMUM		<=8.3 MAXIMUM	12 - SU		01/07 - Weekly	GR - GRAB
NODI: -		NODI										
00530	Solids, total suspended	Smpl.				=26		=30	19 - mg/L	0	01/07 - Weekly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.				<=30 MO AVG		<=50 DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
NODI: -		NODI										
01104	Aluminum, total recoverable	Smpl.						=7800	28 - ug/L	0	01/30 - Monthly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.						Req Mon DAILY MX	28 - ug/L		01/30 - Monthly	CP - COMPOS
NODI: -		NODI										
50050	Flow, in conduit or thru treatment plant	Smpl.	=0.271	=0.281	03 - MGD					0	01/07 - Weekly	TM - TOTALZ
1 - Effluent Gross												
Season: 0		Req.	Req Mon MO AVG	<=1 DAILY MX	03 - MGD						01/07 - Weekly	TM - TOTALZ
NODI: -		NODI										
50060	Chlorine, total residual	Smpl.				=90		=100	28 - ug/L	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				<=110 MO AVG		<=190 DAILY MX	28 - ug/L		01/07 - Weekly	GR - GRAB
NODI: -		NODI										

Permit

Permit ID:	MAG640058	**Major:**	☐
Permittee:	ANDOVER WTP	**Permittee Address:**	DEPT OF PUBLIC WORKS ANDOVER , MA01810
Facility:	ANDOVER WATER TREATMENT PLANT	**Facility Location:**	397 LOWELL STREET ANDOVER , MA01810
Permitted Feature:	001 - External Outfall	**Discharge:**	001-A - BACKWASH DISCHARGE

Report Dates & Status

Monitoring Period:	From 04/01/17 to 04/30/17	**DMR Due Date:**	07/15/17
Status:	**NetDMR Validated**		

Considerations for Form Completion

Principal Executive Officer

First Name:	Alan	**Last Name:**	Carlflo
Title:	Chemist	**Telephone:**	978-623-8872

No Data Indicator (NODI)

Form NODI: -

Parameter		NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			
00400	pH	Smpl.				=6.55		=6.6	12 - SU	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				>=6.5 MINIMUM		<=8.3 MAXIMUM	12 - SU		01/07 - Weekly	GR - GRAB
NODI: -		NODI										
00530	Solids, total suspended	Smpl.				=28		=30	19 - mg/L	0	01/07 - Weekly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.				<=30 MO AVG		<=50 DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
NODI: -		NODI										
01104	Aluminum, total recoverable	Smpl.						=7300	28 - ug/L	0	01/30 - Monthly	CP - COMPOS
1 - Effluent Gross												
Season: 0		Req.						Req Mon DAILY MX	28 - ug/L		01/30 - Monthly	CP - COMPOS
NODI: -		NODI										
50050	Flow, in conduit or thru treatment plant	Smpl.	=0.279	=0.3	03 - MGD					0	01/07 - Weekly	TM - TOTALZ
1 - Effluent Gross												
Season: 0		Req.	Req Mon MO AVG	<=1 DAILY MX	03 - MGD						01/07 - Weekly	TM - TOTALZ
NODI: -		NODI										
50060	Chlorine, total residual	Smpl.				=100		=100	28 - ug/L	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.				<=110 MO AVG		<=190 DAILY MX	28 - ug/L		01/07 - Weekly	GR - GRAB
NODI: -		NODI										

Attachment F

Endangered Species Act Eligibility Information

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To: May 31, 2017
Consultation Code: 05E1NE00-2017-SLI-1707
Event Code: 05E1NE00-2017-E-03434
Project Name: NPDES PWTF GP

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2017-SLI-1707

Event Code: 05E1NE00-2017-E-03434

Project Name: NPDES PWTF GP

Project Type: WATER SUPPLY / DELIVERY

Project Description: NPDES PWTF GP- Drinking Water Treatment Plant Backwash Permit

Project Location:

Approximate location of the project can be viewed in Google Maps:
https://www.google.com/maps/place/42.64505945716441N71.19760591011186W

Counties: Essex, MA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area. Please contact the designated FWS office if you have questions.

Mammals

NAME	STATUS
Northern Long-eared Bat *(Myotis septentrionalis)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

There are no critical habitats within your project area.

Key to the Northern Long-Eared Bat 4(d) Rule for Non-Federal Activities

A separate key is available for Federal Actions

This key will help you determine if your planned activity may cause prohibited take of northern long-eared bats as defined in the 4(d) rule under the Endangered Species Act and if a permit may be necessary. For more information about the northern long-eared bat and 4(d) rule go to www.fws.gov/midwest/endangered/nleb.

1. Will your activity **purposefully take** (see Definitions below) northern long-eared bats? For example, are you removing bats from a human structure or capturing bats for research?

Yes, my activity includes purposefully taking northern long-eared bats.

- ***Removing bats from human structures is not prohibited***; if you are removing bats from a human structure, you may proceed without a permit and you do not need to contact the U.S. Fish and Wildlife Service.

- ***Research that involves handling bats does require a permit*** after May 4, 2016; if you are conducting research that includes capturing and handling northern long-eared bats, you should contact the U.S. Fish and Wildlife Service to apply for a permit. www.fws.gov/endangered/regions

- ***Other purposeful take*** (see Definitions below) of northern long-eared bats is prohibited.

No, my activity does not include purposefully taking northern long-eared bats.
Continue to #2.

2. Is your activity located **outside the White-nose Syndrome Zone?** For the current White-nose Syndrome Zone map, please see www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf

Yes, my activity is located outside the white-nose syndrome zone.
Incidental take (see Definitions below) of northern long-eared bats is not prohibited in areas outside the White-nose Syndrome Zone. You may proceed with your activity, you do not need a permit and you do not need to contact the U.S. Fish and Wildlife Service.

No, my activity is located inside the white-nose syndrome zone.
Continue to #3

3. Will your activity take place **within a cave or mine where northern long-eared bats hibernate** (i.e., hibernaculum) **or could it alter the entrance or the environment (physical or other alteration) of** a hibernaculum?

Yes, my activity will take place within a northern long-eared bat hibernaculum or it could alter the entrance or the environment (physical or other alteration) of a hibernaculum.
All take (see Definitions below) of northern long-eared bats within hibernacula is prohibited, including actions that may change the nature of the hibernaculum's environment or entrance to it, even when the bats are not present. If your activity includes work in a hibernaculum or it could alter its entrance or environment, please contact the Service's Ecological Services Field Office located nearest the project area. To find contact information for the Ecological Services Field Offices, please see www.fws.gov/offices.

No, my activity will not take place within a northern long-eared bat hibernaculum or alter its entrance or environment.
Continue to #4

4. Will your action involve **tree removal** (see definition below)?

No, my activity does not include tree removal.
Incidental take (see Definitions below) from activities that do not involve tree removal and do not take place within hibernacula or would not alter the hibernaculum's entrance or environment (see Question #3), are not prohibited, and a permit is not necessary. You may proceed with your activity, you do not need a permit and you do not need to contact the U.S. Fish and Wildlife Service.

Yes - continue to #5

5. Is your activity the **removal of hazardous trees** for protection of human life or property?

Yes, my activity is removing hazardous trees.
Incidental take (see Definitions below) of northern long-eared bats as a result of hazardous tree removal to protect human life or property is not prohibited. You may proceed with your activity, you do not need a permit and you do not need to contact the U.S. Fish and Wildlife Service.

No, my activity is not removing hazardous trees.
Continue to #6

6. Will your tree removal activities include one or both of the following: **1) removing a northern long-eared bat known occupied maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31; or 2) removing any trees within 0.25 miles of a northern long-eared bat hibernaculum at any time of year?**

No
Incidental take (see Definitions below) from tree removal activities is not prohibited unless it results from removing a known occupied maternity roost tree or from tree removal activities within 150 feet of a known occupied maternity roost tree from June 1 through July 31 or results from tree removal activities within 0.25 mile of a hibernaculum at any time. You may proceed with your activity, you do not need a permit and you do not need to contact the U.S. Fish and Wildlife Service.

Yes
Incidental take (see Definitions below) of northern long-eared bats is prohibited if it occurs as a result of removing a known occupied maternity roost tree or removing trees within 150 feet of a known occupied maternity roost tree during the pup season from June 1 through July 31 or as a result of removing trees from within 0.25 mile of a hibernaculum at any time of year. This does not mean that you cannot conduct your activity. Please contact your nearest Ecological Services Field Office and we will work with you to determine if your activity can proceed without harming or killing northern long-eared bats or if you need to apply for a permit. To find contact information for the Ecological Services Field Offices, please see www.fws.gov/offices

How do I know if there is a maternity roost tree or hibernacula on my property or in my project area?
We acknowledge that it can be difficult to determine if a maternity roost tree or a hibernaculum is on your property or in your project area. Location information for both resources is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. Links to state Natural Heritage Inventory databases are available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

When looking for information on the presence of maternity roost trees or hibernacula within your project area, our expectation is that a project proponent will complete due diligence to determine available data. If information is not available, document your attempt to find the information and move forward with your project.

We do not require private landowners to conduct surveys on their lands. However, surveys can reduce uncertainties and facilitate project planning. Recommended survey methods are available at www.fws.gov/midwest/endangered/mammals/nleb.

Definitions

“Incidental take” is defined by the Endangered Species Act as take that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." For example, harvesting trees can kill bats that are roosting in the trees, but the purpose of the activity is not to kill bats.

“Known hibernacula” are defined as locations where one or more northern long-eared bats have been detected during hibernation or at the entrance during fall swarming or spring emergence. Given the challenges of surveying for northern long-eared bats in the winter, any hibernacula with northern long-eared bats observed at least once, will continue to be considered “known hibernacula” as long as the hibernacula remains suitable for northern long-eared bat.

“Known occupied maternity roost trees” is defined in the 4(d) rule as trees that have had female northern long-eared bats or juvenile bats tracked to them or the presence of female or juvenile bats is known as a result of other methods. Once documented, northern-long eared bats are known to continue to use the same roosting areas. Therefore, a tree will be considered to be a “known occupied maternity roost” as long as the tree and surrounding habitat remain suitable for northern long-eared bat. The incidental take prohibition for known occupied maternity roosts trees applies only during the during the pup season (June 1 through July 31).

“Purposeful take” is when the reason for the activity or action is to conduct some form of take. For instance, conducting a research project that includes collecting and putting bands on bats is a form of purposeful take. Intentionally killing or harming bats is also purposeful take and is prohibited.

“Take” is defined by the ESA as ‘to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect” any endangered species. Purposeful take is when the reason for the activity or action is to conduct some form of take. For instance, conducting a research project that includes collecting and putting bands on bats is a form of purposeful take.

“Tree removal” is defined in the 4(d) rule as cutting down, harvesting, destroying, trimming, or manipulating in any other way the trees, saplings, snags, or any other form of woody vegetation likely to be used by northern long-eared bats.

U.S. Fish & Wildlife Service

Northern Long-Eared Bat Final 4(d) Rule

White-Nose Syndrome Zone Around WNS/Pd Positive Counties/Districts