

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
ONE CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

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

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

MAR 19 2010

A. Facility Information

1. Facility Owner:

Name Auburn Water District e-mail docweagle@auburnwater.com
Street/PO Box P. O. Box 187 City Auburn
State MA Zip Code 01501
Contact Person Dr. Richard Weagle Telephone Number (508) 832-5336

2. Facility Operator (if different from above):

Name _____ e-mail (optional) _____
Street/PO Box _____ City _____
State _____ Zip Code _____
Contact Person _____ Telephone Number _____

3. Facility Data (attach topographic map or other map showing facility and discharge location(s)):

Name AWD Well No. 6 e-mail (optional) _____
Street/PO Box Southbridge Street Court City Auburn
State MA Zip Code 01501
Contact Person Mr. Ken Smith Telephone Number (508) 832-5336
Facility Latitude 42 12' 38.36" Facility Longitude 71 49' 55.73"

4. Standard Industrial Classification (SIC Codes) and Descriptions of Processes:

SIC Code(s) 4941
Description(s) Water Supply

5. Current Permitting Status (please check yes or no):

1. Has a prior NPDES permit been granted for the discharge? Yes ☒ (Permit Number: MAG640072)
No ☐
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes ☐ No ☒
3. Is the facility covered by an individual NPDES permit? Yes ☐ (Permit Number) No ☒
4. Is there a pending application on file with EPA for this discharge? Yes ☐ (Date of submittal:) No ☒

B. Discharge Information

1. Name of Receiving Waterbody Dunns Brook
2. Type of Receiving Waterbody (e.g. stream, lake, reservoir, estuary etc) Stream
3. State Water Quality Classification: B Freshwater: Yes Marine 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 water; and the length of backwash cycle for any combination of number of filters. (attach extra sheets if necessary):

The Southbridge Street Court Water Treatment Plant treats water from Wells No. 4 and 5 through manganese greensand filtration to remove iron and manganese from the water prior to distribution. The Southbridge Street Court plant has two filters which each contain 126 cubic feet of greensand and 110 cubic feet of anthracite coal. Three to seven times per week both filters are backwashed generating approximately 14,200 gallons of backwash effluent. This effluent is directed to a lagoon through an 8-inch diameter ductile iron pipe. The lagoon is 70 ft x 100 ft. The backwash water is retained in the lagoons for a period of 24 hours prior to discharge to allow for sludge settlement. After 24 hours, the control valve on the 8-inch diameter piping to the discharge location at Dunns Brook is opened and the supernatant liquid is released to the discharge point. When the elevation of accumulated sludge in the lagoons gets within 0.5 ft of the discharge pipe invert elevation, the sludge is removed from the lagoon, dewatered, and disposed.

5. Please provide a diagram depicting the treatment methods, outfalls, and receiving water.

6. Number of outfalls: 1 Latitude and Longitude for each outfall (attach additional pages if necessary)
 OUTFALL # Latitude 42 12' 37.65" Longitude 71 49' 53.73"
 OUTFALL # Latitude _____ Longitude _____

For each outfall:

7. What is the proposed sampling location(s) and proposed consistent times of the month for collecting samples:

Samples will be collected from the discharge point outfall on Tuesday of each week. The timing of the sample collection will depend on backwash cycle timing.

C. Effluent Characteristics

1. List here and attach information on any water additives used at the facility (Including chemicals for pH adjustment, dechlorination, control of biological growth, and control of corrosion and scale in water pipes): potassium permanganate (oxidant)
potassium hydroxide (corrosion control), chlorine gas (disinfectant), polyphosphate/orthophosphate blend (corrosion inhibitor)

2. Please report here any known remediation activities or water-quality issues in the vicinity of the discharge.

None

3. Are aluminum-containing coagulants used at this facility? Yes ___ No ☒

4. Does the discharge contain residual chlorine? Yes ☒ No ___

5. Does the facility provide treatment to remove arsenic from the raw water source? Yes ___ No ☒

6. Are phosphorus-containing chemicals added to the treated water at this facility? Yes ☒ No ___

7. All applicants must attach a separate sheet listing all laboratory results (minimum of five) for total recoverable aluminum (in micrograms per liter) taken within the last six months. Do not include dilution when recording your results. See Section 4.4.5 of General Permit for more information.

8. Please include the following effluent data for each outfall:

Characteristic (report if measured)	Average Monthly	Maximum Daily
Discharge Flow (gpd)	<u>6,595</u>	<u>10,400</u>
TSS (mg/l)	<u>2.7</u>	<u>10</u>
pH (s.u.)	(min) <u>6.51</u>	(max) <u>6.85</u>
Total Recoverable Aluminum (ug/l)	<u>data to be collected</u>	<u>data to be collected</u>
Total Residual Chlorine (ug/l)	<u>0.14</u>	<u>0.18</u>

(continued on next page)

8. Continued

Characteristic (report if measured)

Whole Effluent Toxicity (%) LC50 _____ and/or C-NOEC _____

9. If the discharge contains aluminum and/or residual chlorine, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water, the dilution factor, and attach any calculations used to support stream flow and dilution calculations (See Appendix VII for dilution calculations and additional information):

7Q10 0.25 MGD (0.38 cfs) cfs Dilution Factor 38.9 cfs

D. Endangered Species Act Eligibility

1. Using the instructions in Appendix I of the PWTF GP, under which criterion listed in Part II are you eligible for coverage under this general permit?

A ☒ B ☐ C ☐ D ☐ E ☐ F ☐

2. If you selected criteria D or F, has consultation with the federal services been completed? Yes ☐ No ☐

3. If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries 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 ☐

4. Attach documentation of ESA eligibility as described below and required at Part 3.4.1 and Appendix I, Part III, Step 4, of the General Permit.

Criterion A - No federally-listed threatened or endangered species or federally-designated critical habitat are present: A copy of the most current county species list pages for the county(ies) where your site or facility and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your site or facility or discharge locations.

Criterion B - Section 7 consultation completed with the Service(s) on a prior project: A copy of the USFWS's and/or NMFS's, as appropriate, biological opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA Section 7 consultation.

Criterion C - Activities are covered by a Section 10 Permit: A copy of the USFWS's and/or the NMFS's, as appropriate, letter transmitting the ESA Section 10 authorization.

Criterion D - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" federally-listed species or federally-designated critical habitat (not including the four species of concern identified in Section I of Appendix I): A copy of the USFWS's and/or the NMFS's, as appropriate, letter or memorandum concluding that the discharge is consistent with the general permit's "not likely to adversely affect" determination.

Criterion E - Activities are covered by certification of eligibility: A copy of the documents originally used by the other operator of your site or facility (or area including your site) to satisfy the documentation requirement of Criteria A, B, C or D.

Criterion F - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" species of concern, as identified in Section I of Appendix I: A copy of the USFWS and/or the NMFS, as appropriate, concurrence with the applicant's determination that the discharge is "not likely to adversely affect" listed species.

E. National Historic Properties Act Eligibility

1. Using the instructions in Appendix III of the PWTf GP, under which criterion listed in Part III are you eligible for coverage under this general permit?

1 ☒ 2 ☐ 3 ☐

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).

F. Certification

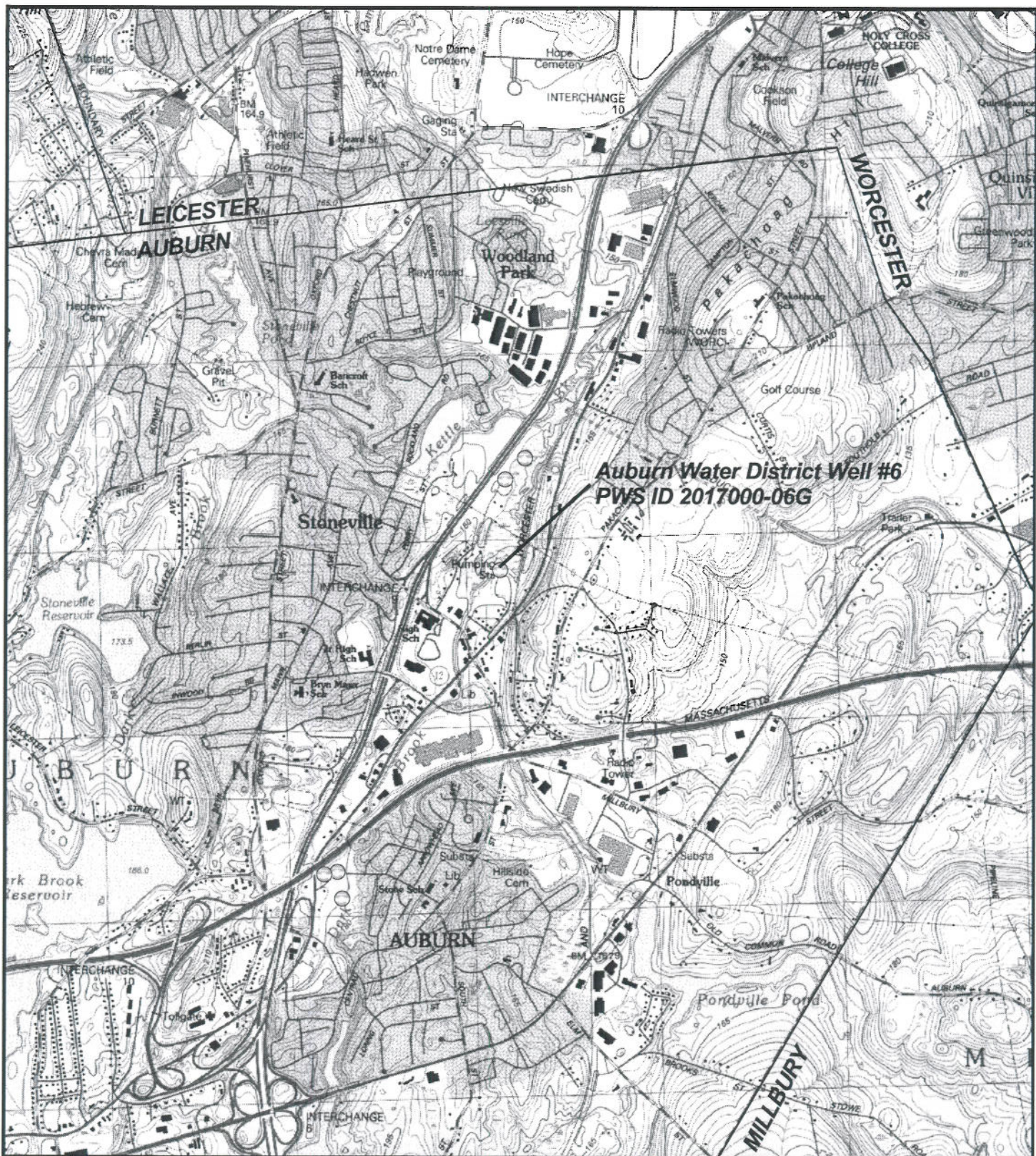
I certify that the discharge for which I am seeking coverage under the general permit consists solely of a surface water discharge from a potable water treatment facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on 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 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature Richard J. Wengle Date 3/12/10
Printed Name and Title RICHARD J. WENGLE SUPR

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For 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 www.epa.gov/region1/npdes/pwtfgp.html



Public Water Supplies
 ○ Ground Water
 ● Surface Water
 ◆ Non Community

NGI

NORTHEAST GEOSCIENCE INC
 Water Supply and Environmental Consulting

Treatment Plant Coordinates:

Lat: 42°12'38.68"

Lon: 71°49'54.90"

Discharge/Outfall Coordinates:

Lat: 42°12'37.65"

Lon: 71°49'55.73"



1000 0 1000 Feet



FIGURE 1

LOCUS MAP
 SOUTHBRIDGE STREET WATER TREATMENT PLANT
 AUBURN WATER DISTRICT
 AUBURN, MASSACHUSETTS

NGI REF: WPT-NPDES

Drafted By: JAF

Date: 8/17/05

Source: Color Orthophotos; MassGIS (2001)



Note: Water treatment plant is a drinking water facility and includes green-sand filtration, disinfection and corrosion control.

Treatment Plant Coordinates:

Lat: 42° 12' 38.68"

Lon: 71° 49' 54.90"

Discharge/Outfall Coordinates:

Lat: 42° 12' 37.65"

Lon: 71° 49' 55.73"



200 0 200 Feet

FIGURE 2

DISCHARGE/OUTFALL LOCATION
SOUTHBRIDGE STREET WATER TREATMENT PLANT
AUBURN WATER DISTRICT
AUBURN, MASSACHUSETTS

NGI REF: WPT-NPDES

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