

DEC 18 2009

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

A. Facility Information

1. Facility Owner:

Name Town of Lenox e-mail lenoxdpw@townoflenox.com  
Street/PO Box 275 Main Street City Lenox  
State MA Zip Code 01240  
Contact Person Jeffrey T. Vincent, DPW Supt Telephone Number 413-637-5525

2. Facility Operator (if different from above):

Name Michael Spencer e-mail (optional) lenoxdpw@townoflenox.com  
Street/PO Box 275 Main Street City Lenox  
State MA Zip Code 01240  
Contact Person Jeffrey Vincent Telephone Number 413-637-5525

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

Name Root Reservoir WTF e-mail (optional) \_\_\_\_\_  
Street/PO Box 471 Reservoir Rd City Lenox  
State MA Zip Code 01240  
Contact Person Jeffrey Vincent Telephone Number 413-637-5525  
Facility Latitude 42 21 59 Facility Longitude 73 19 44

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

SIC Code(s) 4941 Water Treatment Facility  
Description(s) Discharge of water treatment facility wastes

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

- 1. Has a prior NPDES permit been granted for the discharge? Yes X (Permit Number: MAG640015)  
No \_\_\_\_\_
- 2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes \_\_\_\_\_ No X
- 3. Is the facility covered by an individual NPDES permit? Yes \_\_\_\_\_ (Permit Number \_\_\_\_\_) No X
- 4. Is there a pending application on file with EPA for this discharge? Yes \_\_\_\_\_ (Date of submittal: \_\_\_\_\_)  
No X

B. Discharge Information

- 1. Name of Receiving Waterbody Lenox Mountain Brook
- 2. Type of Receiving Waterbody (e.g. stream, lake, reservoir, estuary etc) Stream
- 3. State Water Quality Classification: B Freshwater: X 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 wastewater is composed of sludge and at times backwash water from the treatment plant. The facility has Dissolved Air Flotation treatment process. Sludge is formed on top of the raw water and scooped off. It then goes to a sludgewell in the basement. From there it is pumped to one of two lagoons. Each lagoon is 32' x 106' and hold approximately 102,000 gallons each. Only one lagoon is used per year. The other is off line to allow for freeze drying. After going thru a 10 inch sand/stone bottom and thru underdrain piping, the wastewater flows to a 20,000 gallon settling tank. From there it flows by gravity into drain piping that flows into the Lenox Mountain Brook. The time of travel from lagoon entry to brook is approximately 7 hours.

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 51 59 Longitude 73 19 44  
 OUTFALL # Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

For each outfall:

7. What is the proposed sampling location(s) and proposed consistent times of the month for collecting samples:  
Settling tank after lagoons. Sample time weekly for pH, TSS, Flow, and Monthly for aluminum

### 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): Aluminum sulfate. Polyaluminum chloride

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

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

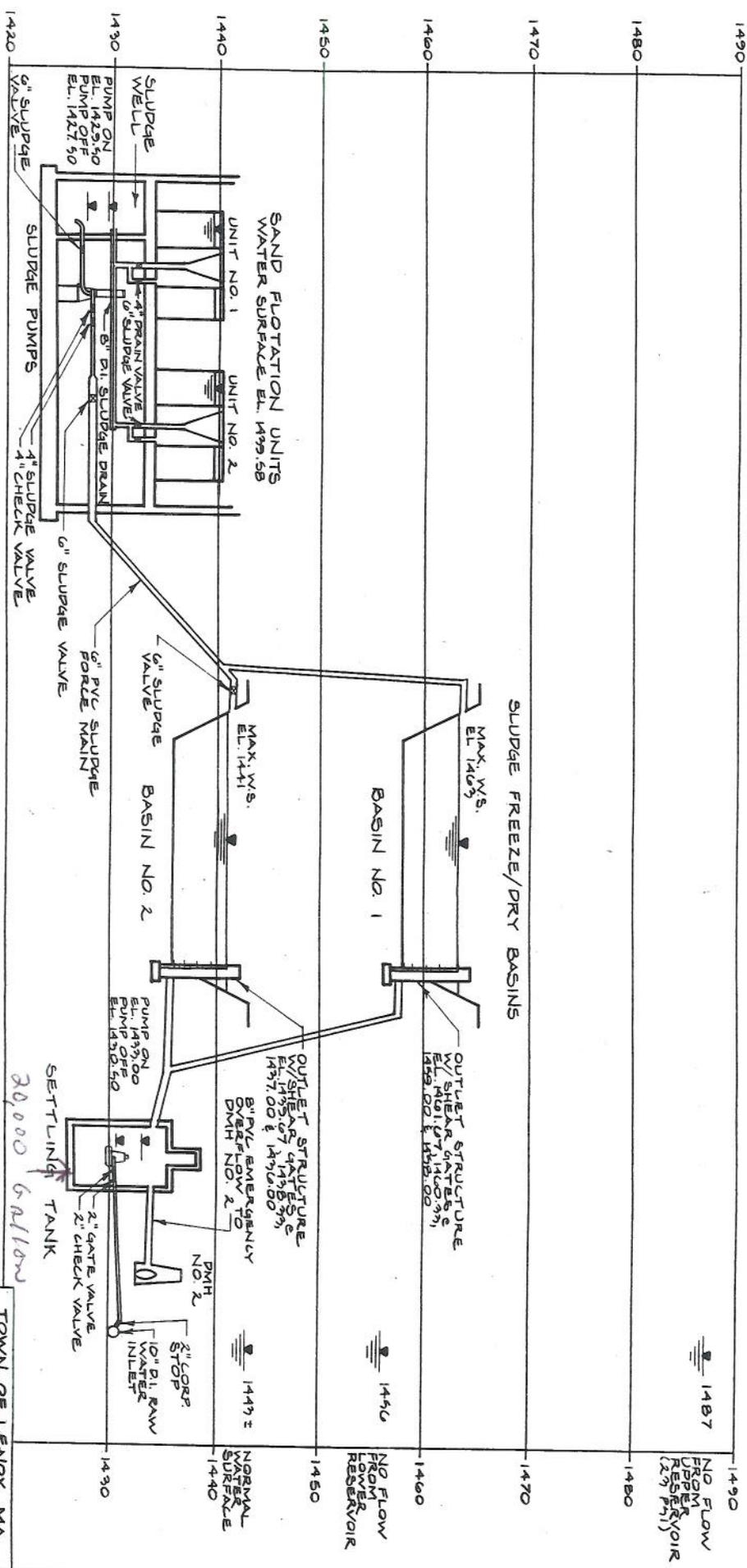
6. Are phosphorus-containing chemicals added to the treated water at this facility? Yes \_\_\_\_\_ No

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>20,000</u>	<u>50,000</u>
TSS (mg/l)	<u>0.03</u>	<u>0.48</u>
pH (s.u.)	(min) <u>7.01</u>	(max) <u>8.92</u>
Total Recoverable Aluminum (ug/l)	<u>&lt;50</u>	<u>110</u>
Total Residual Chlorine (ug/l)	_____	_____

(continued on next page)



**SLUDGE DISPOSAL SYSTEM PROFILE**  
 SCALE: VERT. 1" = 5'  
 HORIZ. NONE'

DESIGNED BY: KGB	DATE: 2/25/22	<b>MASS</b> <b>MMEC INC.</b> MUNICIPAL ENGINEERING CONSULTANTS, INC. P.O. BOX 1217 FITZFIELD, MASSACHUSETTS
DRAWN BY: MMB	DATE: 2/25/22	
CHECKED BY: JAL	DATE: 2/25/22	
APPROVED BY: JAL	DATE: 2/25/22	
TOWN OF LENOX MA. ROOT RESERVOIR WTP O & M MANUAL SLUDGE DISPOSAL SYSTEM PROFILE		SHEET NO.

**ROOT WATER TREATMENT FACILITY  
SLUDGE LAGOON ALUMINUM  
SIX MONTHS ALUMINUM RESULTS  
November 5, 2009**

**LAST**

**MONTH            RESULT IN MICROGRAM/LITERS**

<b>OCTOBER</b>	<b>&lt;15</b>
<b>SEPTEMBER</b>	<b>&lt;50</b>
<b>AUGUST</b>	<b>&lt;50</b>
<b>JULY</b>	<b>90</b>
<b>JUNE</b>	<b>40</b>
<b>MAY</b>	<b>110</b>

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 \_\_\_\_\_ cfs Dilution Factor \_\_\_\_\_ 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.

**FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES  
IN MASSACHUSETTS**

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Raynham and Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Gloucester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hadley, Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, and Wareham
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

- Eastern cougar and gray wolf are considered extirpated in Massachusetts.
- Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
- Critical habitat for the Northern Red-bellied cooter is present in Plymouth County.

7/31/2008

**E. National Historic Properties Act Eligibility**

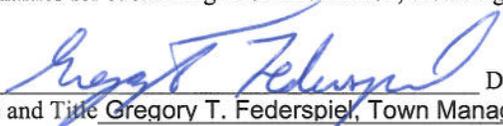
1. Using the instructions in Appendix III of the PWTF GP, under which criterion listed in Part III are you eligible for coverage under this general permit?

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  Date 12/14/09  
Printed Name and Title Gregory T. Federspiel, Town Manager

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](http://www.epa.gov/region1/npdes/pwtfgp.html)