

TOWN OF DANVERS



Danvers Water Treatment Plant
30 Lake Street
Middleton, MA 01949
Telephone (978) 774-5054
Fax (978) 777-9273

December 1, 2009

US EPA, Region 1
PWTF GP Processing
Municipal Assistance Unit (CMU)
1 Congress St., Suite 1100
Boston, MA 02114-2023

Notice of Intent NPDES General Permit No. MAG640000

Dear Sir/Madam:

The Town of Danvers, MA is requesting a renewal of our NPDES General Permit MAG640062 for the Vernon C. Russell Water Treatment Plant located at 30 Lake Street, Middleton, MA 01949.

The discharge from the lagoons located at the water treatment plant occurs during the months of December through March when filter backwash water is discharged to the lagoons. This filter backwash to the lagoons does not occur during the months of April through November. Any discharge of sludge to the lagoons from our sedimentation basins is completely off-set by the volume of sludge that is trucked daily to the South Essex Sewerage District Wastewater Plant for disposal.

The discharge to the lagoons is intermittent. The receiving stream is an unnamed tributary to the Ipswich Rivers and flows only when there is overflow from the lagoons or when it rains. There is no appreciable dilution occurring in the stream when discharging.

There are no Endangered Species impacted by this discharge as determined by Appendix II - The County Species List for Essex County. The Town of Middleton does not designate the area in the vicinity of the lagoon discharge a critical habitat.

Only the Flint Memorial Library in Middleton, MA is listed as a historically significant building adjacent to the receiving stream. Since 1976, through personal observation, there has never been a negative impact on this building from any stream flow. In addition, in conversation with Ms. Sarah George, Middleton Town Clerk and member of the Middleton Historical Commission, there are no other historically significant structures in the vicinity of the receiving stream.

Sincerely,

Donald A. Bancroft
Plant Manager & Chemist
Vernon C. Russell Water Treatment Plant

Enclosures

Cc: Mass DEP, Division of Watershed Management
627 Main St., 2nd Floor
Worcester, MA 01608
Mr. David B. Lane, Director of Public Works
Mr. Rick Rodgers, Town Engineer

RCV'd.
12/10/09

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 Danvers, MA e-mail dlane@mail.danver-ma.org
Street/PO Box Town Hall-Sylvan St. City Danvers
State MA Zip Code 01923
Contact Person Mr. David Lane Telephone Number 978-777-0001 x3015
Dir. DPW

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/discharge location):

Name Vernon C. Russell W.T.P. e-mail (optional) dcbancroft@gmail.com
Street/PO Box 30 Lake St. City Middleton
State MA Zip Code 01949
Contact Person Donald Bancroft Telephone Number 978-774-5054
Latitude 42-35-33 Longitude -071-01-12

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

SIC Code(s) 4941
Description(s) Municipally Owned Facility for drinking Water Production

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

1. Has a prior NPDES permit been granted for the discharge? Yes (Permit Number: MAG640062)
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 Unnamed Tributary to the Ipswich River
2. Type of Receiving Waterbody (e.g. stream, lake, reservoir, estuary etc) Intermittant Stream
3. State Water Quality Classification: N/A Freshwater: 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

**APPENDIX IV
NOTICE OF INTENT INSTRUCTIONS
AND SUGGESTED FORMS**

I. Notice of Intent (NOI) Instructions

A. Required Information

In order to be covered by the Potable Water Treatment Facility General Permit (PWTF GP) applicants must submit a written NOI to EPA and the appropriate state agency. The NOI consists of either the suggested NOI form included in this Appendix or another form of official correspondence that contains all of the required information listed in the General Permit and the suggested NOI form.

B. Signature Requirements

The Notice of Intent must be signed and dated in accordance with the signatory requirements of 40 CFR Section 122.22, including the certification statement shown on the suggested NOI form.

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.

C. Submission of NOI to EPA

Signed and completed NOI forms and attachments must be submitted to EPA at the address included in Appendix VI. A copy of the NOI form and any additional state required forms must also be submitted to the appropriate state agency at the addresses included in Appendix VI. See Part 4.2 and Appendix VI of the PWTF GP for additional State requirements.

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):

Alum coagulation and Chlorine disinfection of Middleton Pond water followed by flocculation and settling operations prior to discharge to two lagoons in series. The discharge is intermittent with approx. 72,000 gpd of filter backwash water at 240 gpm during Dec-March only. The filter backwash is performed for approx. 5 hours daily during the winter. Usable space in the first lagoon is only about 20,000 gals whereas the second lagoon is approx. 150,000 gallons (empty space), resulting in a travel time of approx. 2.4 days.

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

6. Number of outfalls: 1

For each outfall:

7. What is the proposed sampling location(s) and proposed consistent times of the month for collecting samples: Sampling location is the 2nd lagoon overflow. Sampling is weekly during the winter months consisting of 4 grab samples over a 5 hour discharge period.

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): The pH of the discharge will be adjusted using sodium hydroxide.

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 (Finished water only)

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>72,000</u> | <u>80,000</u> |
| TSS (mg/l) | <u>23</u> | <u>39</u> |
| pH (s.u.) | (min) <u>5.6</u> | (max) <u>6.1</u> |
| Total Recoverable Aluminum (ug/l) | <u>980</u> | <u>2800</u> |
| Total Residual Chlorine (ug/l) | <u>50</u> | <u>80</u> |

(continued on next page)

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). *Local: See Attached cover letter.*

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 *Wayne P. ...* Date *12-2-09*
Printed Name and Title *Wayne P. ... 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

8. Continued

Characteristic (report if measured)

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

9. If the discharge contains aluminum and/or residual chlorine, please provide the reported or calculated seven day-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 cfs Dilution Factor 0 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.

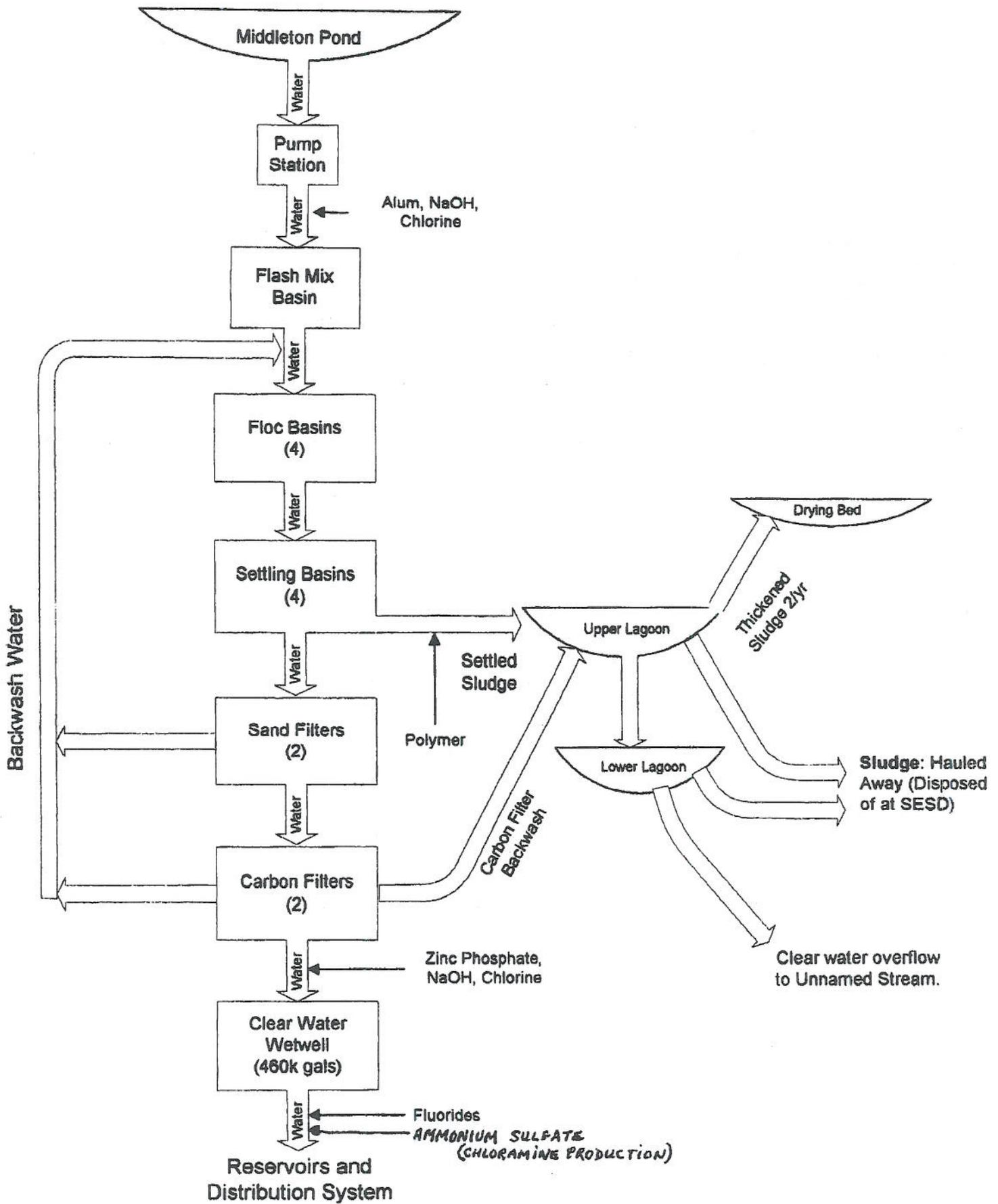
Criterion C - Activities are covered by a Section 10 Permit: A copy of the USFWS's and/or the NMFS's, as appropriate, letter transmitting the ESA Section 10 authorization.

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



Vernon C. Russell Water Treatment Plant
 30 Lake Street
 Middleton, MA 01949
 Process Flow Diagram





Single discharge
LAT/LONG
42 35 33 / -071 01 12