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December 11, 2013

US EPA, Region 1
PWTF GP Processing
Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston, MA 02114-3023

JAN 08 2014

**Re: NPDES Permit NOI
City of Fall River, Massachusetts**

Dear Region 1 US EPA:

On behalf of the City of Fall River, Please find the attached Notice of Intent (NOI) for a National Pollution Discharge Permit applications for the City of Fall River Water treatment Plant located at 1831 Bedford Road, Fall River, Massachusetts.

Please note that the overflow rate of the lagoon was indicated to be 50 gallons per minute (gpm), this value is based on the backwash rate out of the filters. This value does not take into account the evaporation and infiltration values.

Should you have any questions, or require any further information, please feel free to contact me at (781) 221-1037 or via email at chart@fstinc.com.

Very Truly Yours,

BY:

Fay, Spofford & Thorndike

Carina L. Hart
Engineer

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 City of Fall River - Water Department e-mail tsullivan@fallriverma.org
Street/PO Box One Government Center City Fall River
State MA Zip Code 02722
Contact Person Terrance Sullivan Telephone Number (508) 324-2320

2. Facility Operator (if different from above):

Name City of Fall River - Water Department e-mail (optional) rclarkson@fallriverma.org
Street/PO Box 1831 Bedford Street City Fall River
State MA Zip Code 02723
Contact Person Randall Clarkson Telephone Number (508) 324-2725

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

Name City of Fall River - Water Department e-mail (optional) tkaegael@fallriverma.org
Street/PO Box 1830 Bedford Street City Fall River
State MA Zip Code 02723
Contact Person Theodore Kaegael Jr. Telephone Number (508) 324-2725
Facility Latitude 41.7 Facility Longitude -71.1

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

SIC Code(s) 9631
Description(s) Water Treatment Plant - Public Water System

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

1. Has a prior NPDES permit been granted for the discharge? Yes _____ (Permit Number: _____)
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 North Watuppa Pond
2. Type of Receiving Waterbody (e.g. stream, lake, reservoir, estuary etc) drinking water reservoir
3. State Water Quality Classification: Class 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

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):

Treatment methods implemented at the Fall River WTP are conventional coagulation/flocculation and sedimentation followed by rapid sand filtration and disinfection. The waste that enters the lagoon is backwash water from the 4 filters and sludge from the sedimentation basin. These sources have been treated with Poly-aluminum chloride and sodium hydroxide. This waste is sent to a lagoon prior to overflowing back into the North Watuppa Pond overflow. The supernatant overflows into the reservoir at 1 location. there are 2 lagoons with a capacity of 850,000 and 725,000 gallons. Lagoon 1 is 110 ft x 190 feet with a water depth of 5.5 ft. Lagoon 2 is 120 feet x 180 ft with a water depth of 4.5 ft. The overflow pipe is at an elevation of 137.5 on the southern lagoon and 138.5 on the northern lagoon, the base of the lagoons elevation is 133 and the overflow coordinates are 41.7, -71.1. the pipe is 20" in diameter. The water in the lagoons overflow on a continuous basis due to the backwash water and sedimentation basin sludge. The filter backwash system runs in manual, approximately 67,000 gallons per day is produced. The sedimentation basins produce approximately, 1.15 million gallons one time per week. In addition, chlorine is added at different points in the plant, the residual in the overflow was measured to be 0.03 mg/L total chlorine.

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

6. Number of outfalls: 2 Latitude and Longitude for each outfall (attach additional pages if necessary)
 OUTFALL # Latitude 41.7 Longitude -71.1
 OUTFALL # Latitude 41.7 Longitude -71.1

For each outfall:

7. What is the proposed sampling location(s) and proposed consistent times of the month for collecting samples:
 Proposed sampling locations are the lagoon overflows. The samples will be collected the first Monday of each month for analysis.

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):

Please find the attached MSDS sheets for the following chemicals used on the water prior to sedimentation or backwashing: chlorine gas, polyaluminum chloride, carbon dioxide gas, sodium hydroxide.

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

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)	67,941	1,219,941
TSS (mg/l)	6	9
pH (s.u.)	(min) 6.79	(max) 7.05
Total Recoverable Aluminum (ug/l)	0.345	0.635
Total Residual Chlorine (ug/l)	0.01	0.02

(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 0.47 cfs Dilution Factor 5.46 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

Printed Name and Title

Date 01-08-2014

THEODORE J. KAEGHEL JR.

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

JAN 08 2014