

DEPARTMENT OF PUBLIC WORKS AND PARKS

20 East Worcester Street
Worcester Massachusetts 01604

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Commissioner

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Michael V. O'Brien, City Manager

December 21, 2009

Olga Vergara
USEPA
1 Congress St
Suite 1100
Boston, Ma
02114-2023

Dear Ms Vergara

The following is the Worcester DPW and Parks Notice of Intent in regards to Massachusetts General Permit MAG-640052. Our department intends to apply for the NPDES General Permit conditions for the Worcester Water Filtration Plant. This discharge is a single point discharge solely for the purpose of water treatment plant backwash water residuals. The treatment plant uses settling to separate the solids from the backwash water. The solids are removed by pumping directly into a graded sewer line. Supernatant is discharged directly to Holden Reservoir #2 under our present NPDES permit. An additional vacuum system was installed in 2008 to reduce solids discharged under the permit.

We understand that a dilution factor of 10 is going to be allowed under the new general permit to determine the allowable aluminum discharge residual. Our department requests that an additional dilution factor be allowed for the WWFP. Since the treatment plant does not release residuals on a continual basis, we feel a further dilution factor be allowed based on the hours of backwash water release. The treatment plant has an average discharge time of 5.5 hours a day and does not exceed 8 hours a day. Our department feels that an additional dilution of 3 should be included due to the fact that our discharge is intermittent. Therefore our total dilution factor should be 30 instead of 10. Please consider this in determining our residual aluminum calculation under this discharge permit, thank you.

Robert Hoyt
Water Filtration Plant Manager
71 Stonehouse Hill Road
Holden, Ma 01520

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 Worcester DPW & Parks e-mail elliadik@worcesterma.gov
Street/PO Box 18 East Worcester St City Worcester
State Massachusetts Zip Code 01064
Contact Person Konstantin Eliadi Telephone Number _____

2. Facility Operator (if different from above):

Name Robert Hoyt e-mail (optional) hoytr@worcesterma.gov
Street/PO Box 71 Stonehouse Hill Rd City Holden
State Massachusetts Zip Code 01520
Contact Person _____ Telephone Number 508-799-1513

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

Name Worcester Water Filtration Plant e-mail (optional) _____
Street/PO Box 71 Stonehouse Hill Road City Holden
State Massachusetts Zip Code 01520
Contact Person Robert Hoyt Telephone Number 508-799-1513
Facility Latitude _____ Facility Longitude _____

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

SIC Code(s) 7913
Description(s) Water Filtration Plant

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

1. Has a prior NPDES permit been granted for the discharge? Yes ☒ (Permit Number: MAG-640052)
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 Holden Reservoir #2
2. Type of Receiving Waterbody (e.g. stream, lake, reservoir, estuary etc) reservoir
3. State Water Quality Classification: A 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):

two settling basins, solids pumped directly to graded sewer line, supernatant to NPDES discharge point, average discharge 5.5 hours per day, new vacuum system installed in 2008 on one basin to reduce solids

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 42-18°-08.78" Longitude 71-52°-06.81"

OUTFALL # Latitude _____ Longitude _____

For each outfall:

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

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): Ozone, Aluminum Sulfate, Cationic Polymer, Chlorine and Lime (phosphate added but not in discharge)

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:

<u>Characteristic (report if measured)</u>	<u>Average Monthly</u>	<u>Maximum Daily</u>
Discharge Flow (gpd)	<u>0.299 MGD</u>	<u>0.482 MGD</u>
TSS (mg/l)	<u>12.4</u>	<u>32.0</u>
pH (s.u.)	(min) <u>6.72</u>	(max) <u>7.21</u>
Total Recoverable Aluminum (ug/l)	<u>845</u>	<u>1860</u>
Total Residual Chlorine (ug/l)	<u>49</u>	<u>110</u>

(continued on next page)

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?

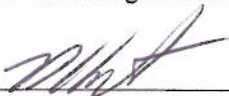
1 ☒ 2 ☐ 3 ☐

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

12/22/09

Printed Name and Title Robert Hoyt, Water Filtration Plant 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

