



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

December 18, 2001

William J. Pauk, P.E.
Superintendent
City of Haverhill
40 South Porter Street
Haverhill, MA 01830

OPTIONAL FORM 38 (7-99)

FAX TRANSMITTAL

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| | | | |
|--------------|------------------|---------|----------------|
| To | MR. WILLIAM PAUK | From | JOY HILTON |
| Dept./Agency | HAVERHILL, MA | Phone # | (617) 918-1877 |
| Fax # | (978) 521-4083 | Fax # | (617) 918-1809 |

Re: NPDES Permit No. MA0101621

Dear Mr. Pauk

Enclosed is an Administrative Order issued to the City of Haverhill, Massachusetts (the "City") pursuant to Section 309(a)(3) of the Clean Water Act, 33 U.S.C. §1319(a)(3). The Order is based upon violations of the above-referenced National Pollutant Discharge Elimination System ("NPDES") permit.

The NPDES permit and Section 301(a) of the Clean Water Act prohibit wet weather combined sewer overflow ("CSO") discharges that cause water quality standards violations. Water quality standards violations attributable to Haverhill CSOs were documented in the Draft Haverhill Massachusetts Long-Term CSO Control Plan, prepared by Camp Dresser & McKee, September 2000. Untreated overflows from the City's collection system continue to occur. Standards violations, therefore, also continue. Additionally, several unpermitted CSO structures have been identified by the City since July 6, 2001.

Among other things, the Order requires the City to complete the Massachusetts Environmental Policy Act process ("MEPA"), to prepare a revised draft and final long term CSO control plan, and to implement a Phase I CSO Abatement Program to reduce the frequency and volume of CSO discharges. The Phase I projects include the design and construction of: (1) modifications to increase the wet weather wastewater treatment facility ("WWTF") capacity to 60 mgd (i.e., sludge collection equipment, grit removal facilities, bypass pipe, concrete junction box, parallel force main, and necessary associated infrastructure improvements); and (2) structural modifications to five Bradford-side CSO regulators.

The Order also includes the following requirements: (1) interim CSO related bypass WWTF monitoring and reporting; (2) collection system monitoring and reporting to determine the

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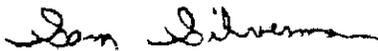
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effectiveness of the nine minimum controls and the Phase I CSO abatement projects and to further characterize overflows from remaining CSOs, and (3) quarterly work progress/projections reporting.

As you know, this Order contains a schedule longer than the EPA believes is necessary. EPA believes that the City could complete the required work sooner than the Order requires. Consequently, if the City does not commit adequate resources to compliance with the Order and falls behind schedule, the EPA is likely to escalate its enforcement. As you know, EPA has chosen to use its enforcement discretion and not seek penalties against municipalities meeting CSO schedules. It would be difficult to imagine the EPA not seeking to collect penalties if the City of Haverhill fails to comply with this schedule.

If you have any questions concerning the terms of this Order, please contact Joy Hilton of the Water Technical Unit at (617)918-1877. Questions concerning compliance with the MEPA requirements should be directed to the EOE-MEPA Office at (617)727-5830.

Sincerely,



Samuel Silverman, Acting Director
Office of Environmental Stewardship

Enclosure

cc: Kevin Brandor, MA DEP-NERO
Sue Figelman, MA DEP-Boston

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I

| | |
|-------------------------------------|-------------------------|
| IN THE MATTER OF |) DOCKET NO. 02-06 |
| |) |
| |) FINDINGS OF VIOLATION |
| City of Haverhill, Massachusetts |) |
| NPDES Permit No MA0101621 |) AND |
| |) |
| Proceedings under Section 309(a)(3) |) ORDER FOR COMPLIANCE |
| of the Clean Water Act, as amended, |) |
| 33 U.S.C. §1319(a)(3) |) |

I. STATUTORY AUTHORITY

The following findings are made and ORDER issued pursuant to Section 309(a)(3) of the Clean Water Act, as amended (the "Act"), 33 U.S.C. §1319(a)(3), which grants to the Administrator of the U.S. Environmental Protection Agency ("EPA") the authority to issue orders requiring persons to comply with Sections 301, 302, 306, 307, 308, 318 and 405 of the Act and any permit condition or limitation implementing any of such sections in a National Pollutant Discharge Elimination System ("NPDES") permit issued under Section 402 of the Act, 33 U.S.C. §1342. This authority has been delegated to EPA's Regional Administrators and further delegated to the Director of EPA, Region I's Office of Environmental Stewardship (the "Director")

The Order herein is based on findings of violation of Section 301 of the Act, 33 U.S.C. §1311, and the conditions of NPDES Permit No. MA0101621. Pursuant to Section 309(a)(5)(A) of the Act, 33 U.S.C. § 1319(a)(5)(A), the Order provides a schedule for compliance which the Director has determined to be reasonable.

II. DEFINITIONS

Unless otherwise defined herein, terms used in this Order shall have the meaning given to those terms in the Clean Water Act, 33 U.S.C. § 1251 et. seq., the regulations promulgated thereunder, and any applicable NPDES permit. For the purpose of this Order, "Permit" means the Permittee's NPDES permit No. MA0101621 and all amendments or modifications thereto and renewals thereof as are applicable, federally-approved and in effect at the time.

III. FINDINGS

The Director makes the following findings of fact.

1. The City of Haverhill, Massachusetts (the "Permittee") is a municipality, as defined in Section 502(4) of the Act, 33 U.S.C. § 1362(4), established under the laws of the Commonwealth of Massachusetts.
2. The Permittee is a person under Section 502(5) of the Act, 33 U.S.C. § 1362(5). The Permittee is the owner and operator of an 18.1 million gallons per day ("mgd") secondary wastewater treatment facility ("WWTF") and combined sewer overflow ("CSO") outfalls from which it discharges pollutants, as defined in Section 502(6) and (12) of the Act, 33 U.S.C. § 1362(6) and (12), from point sources, as defined in Section 502(14) of the Act, 33 U.S.C. § 1362(14), to the Merrimack River and the Little River. The Merrimack River and Little River are Class SB and Class B waterways, respectively, in the vicinity of the Permittee's discharges and are navigable waters under Section 502(7) of the Act, 33 U.S.C. § 1362(7). The WWTF is currently rated to provide secondary treatment to an average daily flow of 18.1 million gallons and to provide primary treatment to a peak flow of 46 mgd.

- 3 On April 14, 1998, the Permittee was issued NPDES permit No. MA0101621 (the "Permit") by the Director of the Office of Ecosystem Protection of EPA New England, under the authority given to the Administrator of EPA by Section 402 of the Clean Water Act, 33 U.S.C. §1342. This authority has been delegated by the Administrator of EPA to the Regional Administrator of EPA New England, who has in turn delegated this authority to the Director of the Office of Ecosystem Protection. The Permit became effective on May 14, 1998 and will expire on May 14, 2002, four years from the effective date.
4. The Permit authorizes the Permittee to discharge pollutants from specific point sources from the combined sewer system to the Merrimack River and Little River provided the discharges do not cause violations of state water quality standards.
5. Section 301(a) of the Act, 33 U.S.C. §1311(a), makes unlawful the discharge of pollutants to waters of the United States except, among other things, in compliance with the terms and conditions of an NPDES permit issued pursuant to Section 402 of the Act, 33 U.S.C. §1342.
6. The Permittee has submitted CSO monitoring data to EPA and the Massachusetts Department of Environmental Protection ("MA DEP") demonstrating that the water quality standards for fecal coliform bacteria were exceeded due to CSO discharges from the Permittee's combined sewer system
- 7 The Permittee's discharge of wastewater with bacteria that caused levels of bacteria to exceed the state water quality standards in the receiving water occurred in violation of the Permit and Section 301(a) of the Act, 33 U.S.C. §1311(a).

8. On October 5, 2000, the Permittee submitted the Haverhill, Massachusetts Draft Long-Term CSO Control Plan ("DLTCP"), prepared by Camp Dresser & McKee, September 2000, which included an analysis of the costs and benefits of a range of CSO abatement measures.
9. On July 6, 2001, the Permittee identified an unpermitted CSO structure (located at the intersection of Winter and Hale Streets) when investigating an oil spill discharge to the Little River. Field investigation to identify other unpermitted CSO structures was initiated.

IV ORDER

Accordingly, pursuant to Section 309(a)(1) of the Clean Water Act, it is hereby ordered that:

A Planning Requirements

1. By December 15, 2001, the Permittee shall submit a report to EPA and the MA DEP that: (a) describes the collection system field investigations conducted since September 2000 and all findings; (b) identifies any diversion structures not previously evaluated in the September 2000 DLTCP; (c) includes a revised Combined Sewer System model that includes all CSO diversion structures; and (d) identifies any additional field sampling or investigations necessary in order to fully evaluate CSO control alternatives and complete a Revised Draft Long-Term CSO Control Plan ("RDLTCP")
2. By January 14, 2002, the Permittee shall submit to EPA and the MA DEP for review a RDLTCP. The RDLTCP shall satisfy EPA's September 1995 Combined Sewer Overflows Guidance for Long Term Control Plan (EPA 832-B-95-002).

include a detailed assessment of CSO control alternatives for all identified CSOs (including the CSO structures identified since September 2000), and shall address the comments issued on the previous DLTCP by EPA and the MA DEP. The RDLTCP shall also include a recommended plan for addressing all remaining CSOs.

3. The Secretary of the Massachusetts Executive Office of Environmental Affairs ("EOEA") has determined that an Environmental Impact Report ("EIR") is required for this project. The Permittee shall develop the Draft EIR concurrently with the RDLTCP and shall submit the Draft EIR to the EOEA Secretary by January 14, 2002. The scope for the Draft EIR shall meet the requirements of 30 M.G.L. s. 61 through 62H and 301 CMR 11.00 et seq.
4. The Permittee shall submit a Final Long-Term Control Plan/Final Environmental Impact Report ("Final EIR") to EPA, the MA DEP, and the EOEA Secretary by August 2, 2002. The Final EIR shall include a recommended plan with all CSO abatement measures described in Section IV.B. of this Order, along with any other CSO abatement measures necessary to comply with the requirements of the Clean Water Act and State and Federal CSO policies. The scope for the Final EIR shall meet the requirements of 30 M.G.L. s. 61 through 62H and 301 CMR 11.00 et seq and shall address comments made on the Draft EIR as directed by the EOEA Secretary.
5. The City shall submit a copy of the EOEA Secretary's decision letter to EPA and the MA DEP in the reports submitted under Order Section IV.C.3. below.

B. Phase I CSO Abatement Program The Permittee shall design and construct CSO abatement facilities in accordance with the following.

I. Increased Wet Weather Treatment Capacity

- a. By April 1, 2003, the Permittee shall submit to EPA for review and to the MA DEP for review and approval the final plans and specifications for WWTF and collection system modifications to enable the Permittee to provide primary treatment (grit removal, primary sedimentation, and disinfection) to 60 mgd of wet weather flows. (See the DLTCP, Volume I, pp. 7-3 and 7-4, and Volume II, Appendix ^CA for project description. This project includes: (a) a parallel force main; (b) grit removal and handling facilities; (c) sludge and scum collection equipment to be installed on the three primary clarifiers; (d) concrete box and 66-inch pipe for wet weather bypass, and a separate dosing point for chlorine on the primary effluent channel, and (e) necessary associated infrastructure improvements.)
- b. Within 120 days of MA DEP approval of final plans and specifications, the Permittee shall begin construction of the project to increase the WWTF wet-weather capacity to 60 mgd in accordance with the plans and specifications approved by the MA DEP.
- c. Within 24 months of the begin construction date, the Permittee shall complete construction of the project to increase the WWTF wet-weather capacity to 60 mgd in accordance with the plans and specifications

approved by the MA DEP and commence operation of the completed facility.

- d. Within 24 months of the begin construction date, the Permittee shall provide primary treatment to at least 60 mgd as necessary during wet weather, shall provide secondary treatment to the maximum flows possible with its then-existing treatment facility, and shall maintain full compliance with the interim effluent limits and monitoring and reporting requirements included in paragraph IV C. of this Order.

2. Structural Modifications of Bradford-Side CSOs.

- a. By May 3, 2003, the Permittee shall submit to EPA for review and to the MA DEP for review and approval the final plans and specifications for structural modifications at five Bradford-side CSOs located at Front Street (CSO #031), Middlesex Street (CSO #034), South Main Street (CSO #035), Ferry Street (CSO #036), and South Prospect Street (#033) (hereafter, the "Bradford CSO Project") (see DLTCP, Volume i, pp 7-11 and 7-12 for a project description).
- b. Within 5 months of MA DEP approval of final plans and specifications, the Permittee shall begin construction of the Bradford CSO Project in accordance with the plans and specifications approved by the MA DEP
- c. Within 15 months of the begin construction date, the Permittee shall complete construction of the Bradford CSO Project in

accordance with the plans and specifications approved by the MA DEP and shall begin operating the new facilities

C. WWTF Wet Weather Monitoring and Reporting Requirements

I. Interim CSO Related Bypass (During Phase I CSO Abatement Program Implementation)

- a. During wet weather events, the Permittee shall process as much flow through the WWTF as practicable. Prior to initiating a bypass, the flow through the secondary treatment facilities (aeration and clarification), shall be maximized. Once the modifications are completed as discussed in Order paragraph IV.B.1. the Permittee shall provide primary treatment to the practical limit of the primary facilities of 60 mgd under normal operating conditions. Until such time as the Permittee has completed the requirements of Order paragraph IV.B.1., a total of approximately 46 mgd will be processed in accordance with the terms of this paragraph (unless prohibited by equipment related issues).
- b. While the CSO related bypass is occurring, the flows receiving secondary treatment shall achieve the Permittee's NPDES effluent limitations. The Permittee is not required to use BOD and TSS data from days with CSO related bypass events when calculating average monthly percent removal of these pollutants. During the CSO related bypass events, the blended final effluent shall achieve the fecal coliform bacteria, pH and total chlorine

residual limits as set forth in the Permittee's then current NPDES permit and the monitoring and reporting requirements detailed in Attachment 1. When the CSO related bypass is not active, the facility shall achieve all the Permit effluent limitations.

2. Collection System Monitoring Program. By August 1, 2002, the Permittee shall submit to EPA and the MA DEP a collection system monitoring program for review and approval. The plan shall include a proposed implementation schedule. The purpose of the monitoring program is to determine the effectiveness of implementing the Nine Minimum Controls and the Phase I CSO Abatement Projects in reducing CSO discharges, as well as to further characterize the overflows from the remaining CSOs. Information collected shall be summarized and included in the reports submitted under Order Section IV.C.3. below.
3. Quarterly Progress Reports and Work Projections. Progress reports on CSO abatement projects implementation shall be submitted to EPA and the MA DEP by January 15, April 15, July 15 and October 15 of each year. The reports shall:
 - (1) describe the work performed during the previous three month period;
 - (2) include a projection of the work to be performed during the next three month period, and
 - (3) include a copy of any and all contracts signed and decisions issued by the EOEA Secretary during the previous three month period for tasks related to this Order.The first quarterly report, for the January through March 2002 quarter, is due by April 15, 2002.

V. NOTIFICATION PROCEDURES

1. Where this Order requires a specific action to be performed within a certain time frame, the Permittee shall submit a written notice of compliance or noncompliance with each deadline. Notification must be mailed within fourteen (14) days after each required deadline. The timely submission of a required report shall satisfy the requirement that a notice of compliance be submitted.
2. If noncompliance is reported, notification should include the following information:
 - a. A description of the noncompliance;
 - b. A description of any actions taken or proposed by the Permittee to comply with the elapsed schedule requirements;
 - c. A description of any factors which tend to explain or mitigate the noncompliance;
 - d. An approximate date by which the Permittee will perform the required action
3. After a notification of noncompliance has been filed, compliance with the past requirement shall be reported by submitting any required documents or providing EPA with a written report indicating that the required action has been achieved.
4. Submissions required by this Order shall be in writing and should be mailed to the following addresses:

U.S. Environmental Protection Agency
Region I
One Congress Street, Suite 1100 (SEW)
Boston, MA 02114-2023
Attn: Joy Hilton

and

Massachusetts Department of Environmental Protection
Northeast Regional Office
205A Lowell Street
Wilmington, MA 01887
Attn: Kevin Brander

VI. GENERAL PROVISIONS

1. The Permittee may, if it desires, assert a business confidentiality claim covering part or all of the information requested, in the manner described by 40 C.F.R. § 2.203(b). Information covered by such a claim will be disclosed by EPA only to the extent, and by means of the procedures, set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, the information may be made available to the public by EPA without further notice to the Permittee. The Permittee should read the above-cited regulations carefully before asserting a business confidentiality claim since certain categories of information are not properly the subject of such a claim. For example, the Clean Water Act provides that "effluent data" shall in all cases be made available to the public. See Section 308(b) of the Act, 33 U.S.C. § 1318(b).
2. This Order does not constitute a waiver or a modification of the terms and conditions of the Permit. The Permit remains in full force and effect. EPA reserves the right to seek any and all remedies available under Section 309 of the Act, 33 U.S.C. § 1319, as amended, for any violation cited in this Order.

3 This Order shall become effective upon receipt by the Permittee and supersedes the Order
(Docket No. 02-02) issued to the Permittee by EPA on November 2, 2001

12-17-01

Date

Sam Silverman

Samuel Silverman, Acting Director
Office of Environmental Stewardship
Environmental Protection Agency, Region 1

ATTACHMENT 1

Interim CSO Related Bypass Events Monitoring and Reporting Requirements

During the period that the Administrative Order is effective, during wet weather events when the influent flow rate to the wastewater treatment plant exceeds the secondary treatment plant capacity, the Permittee is required to process as much flow through the WWTF as practicable. Prior to initiating a bypass, the Permittee is required to maximize flow through the secondary treatment facilities and is required to provide primary treatment to the practical limit of the primary facilities under normal operating conditions. The blended final effluent discharges, identified herein as outfall SUMA discharges, shall be limited and monitored as specified below, and may only occur under the conditions described in Order paragraph IV C 1.b. While the bypass is occurring, the flows receiving secondary treatment are required to comply with the Permittee's NPDES outfall 001 effluent limitations.

| Effluent Characteristics Parameter | Discharge Limitations | | | Monitoring Requirements ^{1,2,3,4} | |
|--|-----------------------|------------------|-------------------------|--|-------------|
| | Average Monthly | Average Weekly | Maximum Daily | Measurement Frequency | Sample Type |
| Flow ⁵ | ----- | ----- | Report | Continuous | Recorder |
| BOD ₅ | Report (mg/l) | Report (mg/l) | Report (mg/l) | 1/Bypass Day | Composite |
| TSS | Report (mg/l) | Report (mg/l) | Report (mg/l) | 1/Bypass Day | Composite |
| pH ⁶ | ----- | ----- | ----- | 1/Bypass Event per Bypass Day | Grab |
| Total Chlorine Residual | ----- | ----- | Current Permit Limit | 1/Bypass Event per Bypass Day | Grab |
| Fecal Coliform Bacteria | ----- | ----- | Current Permit Limit | 1/Bypass Event per Bypass Day | Grab |
| Overflow Use Occurrences ⁷ | ----- | ----- | ----- | ----- | ----- |

Footnotes are on page 2 of this Attachment.

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ATTACHMENT I Footnotes:

1. All samples shall be tested using EPA approved methods as stated at 40 CFR §136, unless otherwise defined in the permit.
2. A "bypass event" is defined as the period of time between initiation of the bypass of secondary treatment and ceasing the bypass of secondary treatment. A "bypass day" is any portion of a calendar day in which a bypass event is occurring.

For bypass events exceeding one calendar day in duration, sampling shall be performed each day of the event according to the measurement frequency specified. For example, if a bypass event covers all or part of three calendar days, the permittee shall take three composite samples; one sample at the end of the calendar day or at the end of the bypass event. Samples shall be flow proportional.

3. The permittee shall submit to EPA copies of all self-monitoring data required by the Massachusetts Department of Environmental Protection as reported on Monthly Operations Reports sheets. Blended final effluent (outfall SUMA) discharge data shall be submitted on monthly Discharge Monitoring Reports as specified by the NPDES Permit.
4. Samples for Fecal Coliform bacteria, pH, and total residual chlorine will be collected downstream of all treatment processes and analyzed in accordance with the permittee's then current NPDES Permit. The permittee will ensure that the sample(s) will be taken during at least one bypass event per bypass day.

Effluent sampling for NPDES compliance for BOD, and TSS, on each bypass day, shall be collected after the secondary clarifiers and before the blend with the wet weather bypass.

5. The permittee shall report bypass flow, secondary flow, and total flow.
6. The pH of the blended effluent shall not be less than 6.5 nor greater than 8.5 at any time, unless these values are exceeded due to natural causes or as a result of approved treatment processes.
7. Report the number of "bypass days" and the number of hours per day that the CSO related bypass occurred.