



City of Gloucester
City Council

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CITY COUNCIL STANDING COMMITTEE
Ordinances & Administration
Monday, February 14, 2011 – 6:30 p.m.
1st Fl. Council Conference Rm. – City Hall

AGENDA

1. Old Business:

- A) Amending GCO Chap. 11 Hawkers and Peddlers and Transient Vendors Sec. 11-5 (6) (2) Fixed Vending; site specific locations, Rogers Street – Ten (10) feet east of its intersection with Commercial and Washington Streets

2. Continued Business:

- A) CC2010-019 (Verga/Whynott) City Council to investigate the possibility and procedure to Consolidate polling locations (Cont'd from 09/20/10)
B) Letter and documentation from Deputy Fire Chief Aiello re: enactment of ordinance to bill for Certain Fire Dept. responses (Referred from B&F Committee on 01/31/11)
C) CC2010-080 (Curcuro) Amend GCO Sec. 22-287 (Disabled veteran, handicapped parking) re: Vicinity of 197 Washington Street (Cont'd from 01/31/11)

3. Memo from Police Chief and Fire Chief re: adoption of MGL Chap. 31 §58A pertaining to hiring Full-time Police and Firefighter positions (referred from B&F Committee 02/03/11)

4. Memorandum and Information regarding proposed changes to Gloucester City Ordinance Chapter 10-Waterways Administration

5. CC2011-006 (Mulcahey) Amend GCO Chapter 21 "Streets" by adding new Section 21-18(b) Re: private snow contractors

6. City's submission to the EPA on the Public Comment: Tentative 201(h) Waiver Decision Document; Draft NPDES Permit (referred from City Council 02/08/11)

COMMITTEE

Councilor Sefatia Theken, Chair
Councilor Ann Mulcahey, Vice Chair
Councilor Bruce Tobey

Committee members – Please bring relevant documentation

Back-up and Supporting Documentation all on file at the City Clerk's Office, City Hall

CC: Mayor Carolyn Kirk

Jim Duggan

Linda T. Lowe

Suzanne Egan

Fire Chief Dench/Police Chief Lane

Harbormaster Jim Caulkett

Mike Hale/Mark Cole



**CITY OF GLOUCESTER
FOR COUNCIL VOTE 2011**

**DATE RECEIVED BY COUNCIL: 01/25/11
REFERRED TO:
FOR COUNCIL VOTE: 01/25/11**

**MOTION TO MOVE TO REFER AMENDING GCO, CHAP 11, HAWKERS AND
PEDDLERS AND TRANSIENT VENDORS, SEC. 11-5(2) FIXED VENDING;
SITE SPECIFIC LOCATIONS BACK TO ORDINANCES & ADMINISTRATION
STANDING COMMITTEE FOR FURTHER REVIEW AND TO REPORT BACK
TO CITY COUNCIL WITH DISPOSITION OF SAME**

CITY COUNCIL STANDING COMMITTEE

Ordinances & Administration

Monday, September 20, 2010 – 5:30 p.m.

1st Fl. Council Conference Room – City Hall

Present: Chair, Councilor Sefatia Theken; Steven Curcuru (Alternate) Councilor Greg Verga (Acting Alternate); Councilor Ann Mulcahey

Absent: Councilor Tobey

Also Present: Councilor Hardy; Councilor McGeary, Councilor Verga, Councilor Ciolino; Linda T. Lowe; Jim Duggan; Suzanne Egan; Larry Ingersoll; Russell Hobbs; Roslyn Frontiero; Ed Dahlmer; Janet Rice; Martin Ray; Kersten Lanes; David Lincoln; Ann Rhineland; Sandra Sanfilippo; Kasha Gula; Marsha Perkins; Bruce Maki; Damon Cummings; Patricia Towler; Kathryn Noonan; Betsy Works; Diane Usevich; Lucille LePage; Ann Banks; Amanda Nash; Marcia Hart; Beverly Feinberg-Moss; Carol Berluman; Jess Semeraro; Linda Maki; Paul Sander; Timothy Perkins; Doug Smith

The meeting was called to order at 5:33 p.m. Items were taken out of order. There was a quorum of the City Council.

1. Continued Business:

- A) CC2010-019 (Verga/Whynott) City Council to investigate the possibility and procedure to consolidate polling locations (Continued from 07/12/10)

Ms. Lowe informed the Committee that she was awaiting word from some Ward Councilors although she believed the consolidation was well supported by them. Efforts have been made by them to inform their constituents. The consolidation would not happen this year, but would perhaps be in place for the next year's local elections.

Councilor Hardy expressed she would be willing to go to the people in her ward but would like to wait for the Council presentation by Ms. Lowe to the City Council in October to take back a consistent message to her constituency.

This matter is continued to February 2011.

- B) CC2010-023 (Tobey) Amend GCO Sec. 22-289 re: Main Street Parking Meter Time Limits (Continued from 07/26/10)

Councilor Tobey communicated prior to the meeting that he would appreciate this matter being continued to the October 18, 2010 meeting when he can be in attendance.

Councilor Theken stated she would continue this matter only once more; to either take action to move it forward to the Council or drop the matter.

Councilor Ciolino asked if the parking meter issue can be separated from the shuffling ordinance.

Councilor Theken asked that there be language for the shuffling ordinance be presented again in the packet for the Councilors' review.

This matter is continued to the October 18, 2010 meeting.

- C) CC2010-024 (Hardy) Request from Engineering Department of the DPW a copy of the City's Official 'layout of the road' at the intersection of Washington St., Holly St., Goose Cove Lane and Vine St. (Cont'd from 07/26/10)



CITY OF GLOUCESTER

POLICE DEPARTMENT
197 MAIN STREET
GLOUCESTER, MA 01930

RECEIVED

JAN 10 2010

Mayor's Office

To: Mayor Carolyn Kirk
From: Michael Lane, Chief of Police
Phil Dench, Fire Chief
Date: January 6, 2011
Subject: Adoption of MGL Ch.31 Sec.58A

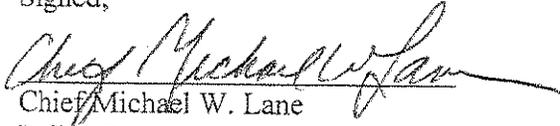
I would like to request that the City Council consider the adoption of Massachusetts General Laws Chapter 31, Section 58A as allowed by law. If adopted, this would require the City of Gloucester to hire persons age 32 or younger for full time police and fire fighter positions. As it currently stands, candidates may be considered for appointment up to age 65. Recent changes in the law have allowed consideration for veterans for up to four years of credible service time above age 32, thus allowing a veteran to be considered for appointment until age 36.

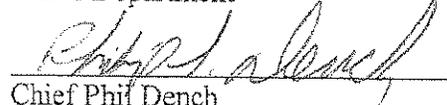
Fire Chief Phil Dench and I feel that the adoption of this law is in the best interest of the City in obtaining the best possible candidates for the Police and Fire Departments.

I respectfully ask that this matter be offered to the full City Council for referral to the Ordinance and Administration sub-committee for discussion.

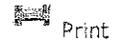
Attached please find a copy of Massachusetts General Laws Chapter 31, Section 58A.

Signed,


Chief Michael W. Lane
Police Department


Chief Phil Dench
Fire Department

*Approved
C. Kirk
1/14/11*



PART I ADMINISTRATION OF THE GOVERNMENT
(Chapters 1 through 182)

TITLE IV CIVIL SERVICE, RETIREMENTS AND PENSIONS

CHAPTER 31 CIVIL SERVICE

Section 58A Municipal police officers and firefighters; maximum age restrictions

Section 58A. Notwithstanding the provisions of any general or special law to the contrary, in any city, town or district that accepts this section, no person shall be eligible to have his name certified for original appointment to the position of firefighter or police officer if such person has reached his thirty-second birthday on the date of the entrance examination. Any veteran shall be allowed to exceed the maximum age provision of this section by the number of years served on active military duty, but in no case shall said candidate for appointment be credited more than four years of active military duty.

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CITY OF GLOUCESTER
OFFICE OF THE MAYOR

MEMORANDUM

TO: Gloucester City Council
FR: Mayor Carolyn Kirk
RE: Proposed Changes to Gloucester City Ordinance Chapter 10 – Waterways Administration
DT: February 2, 2011

cc: Suzanne Egan, City Solicitor
Peter Bent, Chairman, Waterways Board
Jim Caulkett, Harbormaster

Councilors,

Over the past year, the Waterways Board has put considerable effort and thought into some of the changes they would like to see in the City Ordinance governing Gloucester waterways. Enclosed for your review and approval are the changes recommended by the Waterways Board.

In addition, the Administration has put considerable effort and thought into the recently state-approved Harbor Plan 2009 along with the recently completed Harbor Economic Development Plan. The Harbor economic engine includes reliance on the fishing industry, the broader maritime economy, and the visitor-based economy. The goal at this time is better align the composition of the Waterways Board with harbor economic development and those three key industry segments. Therefore, the Administration proposes the following change to Gloucester City Ordinance Chapter 10, Article I, Section 1-2(a):

- (a) Composition. The Gloucester Waterways Board shall consist of seven (7) citizens of Gloucester, appointed by the Mayor and confirmed by the city council. The appointees shall include two (2) persons who are directly involved with the fishing industry, two (2) persons who are recreational boaters, two (2) persons involved in harbor economic development, and (1) person, at large, who need not be involved with any marine related activity.

There are multiple references within the current Ordinance recognizing the need to promote implementation of the Gloucester Harbor Plan (Article I. Sec. 10-3 (a)) and the need to work cooperatively with the Tourism Commission, for example (Article II. Sec. 10-22(g)). However, at this time, the Administration believes the Ordinance needs to be updated to become more firmly involved in Harbor economic development. Membership that includes this emphasis will help the city reach this goal.

As always, we look forward to working with the City Council in the coming weeks.



Nineteen Harbor Loop
Gloucester, MA 01930

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jcaulkett@gloucester-ma.gov

CITY OF GLOUCESTER
HARBORMASTER'S OFFICE

Memorandum

From: Jim Caulkett, Harbormaster
To: Mayor Carolyn Kirk
Date: November 19, 2010
Subject: Mayor's Report to Council

RECEIVED

NOV 19 2010

Mayor's Office

Mayor Kirk,

In your next Report to Council, Ordinances and Administration Committee will you please include the attached proposed changes to Gloucester City Ordinance Chapter 10, Article I, Section 10-4, Waterways Administration.

If you have any questions please feel free to contact me.

Sincerely,

Jim Caulkett

ORIGINAL TEXT GLOUCESTER CODE OF ORDINANCES CHAPTER 10
ARTICLE 1 SECTION 10-4 STANDING COMMITTEES

(Section 10-4) Standing Committees

(a) Designation - There shall be three (3) advisory standing committees of the Waterways Board, appointed by the Chairman: a **Waterways Safety Committee**; a **Public Facilities Committee**; and an **Operations & Finance Committee**. The committees shall review, research, investigate and make recommendations on matters referred to them by majority vote of the full Board. The committees shall send their reports and recommendations only to the full Board which shall review them and take appropriate action. The Harbormaster shall be an ex-officio member of each committee. Every member of the Board except the Chairman shall be on at least one Standing Committee and each committee shall elect its own Chairman.

(1) Waterways Safety Committee - This committee may be referred any matter dealing with: enforcement of boating laws and regulations; other law enforcement activities including the need and nature of police patrols during various times of the year and during special waterfront events; fire prevention and suppression needs; hazardous materials; emergency medical services; hazards to navigation; rules and regulations regarding use of the City's waterways; City Ordinances dealing with the waterways or waterfront; and any other matter deemed appropriate by the Board. This Committee shall consist of: two (2) members of the Board; Police and Fire Chiefs or their designees; and a representative of Coast Guard Station Gloucester.

(2) Public Facilities Committee - This committee may be referred any matter dealing with: moorings; public launch ramps; including Dun Fudgin; public landings; public marinas; including St. Peter's Marina; signage; public access, including but not limited to, walkways to the water, access ramps and floats and dinghy floats; sewage pumpout facilities; waste oil recycling facilities; Harbormaster floats and offices; and any other matter deemed appropriate by the Board. This Committee shall consist of: two (2) members of the Board; an advocate of public landings appointed by the Mayor; the Director of Public Works, or his designee; and a member of the Tourist Commission.

(3) Operations and Finance Committee - This committee may be referred any matter dealing with: harbor planning, design, engineering or construction; budgets; intergovernmental relations; the Harbormaster's Office, including but not limited to, staffing; training; vessels and equipment; work and educational programs; fees and fines; and any other matter deemed appropriate by the Board. This committee shall consist of two (2) members of the Board; a member of the Fisheries Commission; and a member of the City Council.

Proposed change to Gloucester Code of Ordinances Chapter 10
Article 1 Section 10-4 Standing Committees

(Section 10-4) Standing committees

(a) There shall be two (2) advisory standing committees of the Waterways Board, appointed by the Chairman: a Public Facilities Committee and an Operations & Finance/ Safety Committee. The committees shall review, research, investigate, and make recommendations on matters referred to them by the majority vote of the full Board. The committees shall send their reports and recommendations only to the full Board which shall review them and take appropriate action. The Harbormaster shall be an ex-officio member of each committee. Every member of the Board except the Chairman shall be on at least one committee. Each committee shall elect its own Chairman. The Chairman shall be an alternate member of all committees.

(1)Public Facilities Committee- This committee may be referred any matter dealing with: moorings, public launch ramps; including Dun Fudgin; public landings; city marinas; including St. Peter's and Harbor Cove; signage; public access, including but not limited to walkways to the water, access ramps and floats and dinghy floats; sewage pumpout facilities; waste oil recycling facilities; Harbormaster floats and offices; and any other matter deemed appropriate by the Board. This Committee shall consist of three (3) members of the Board and advisory members from the Director of Public Works or his designee, an advocate for Public Landings as appointed by the Mayor, and a member of the Tourist Commission as needed.

(2)Operations and Finance/ Safety Committee – This committee may be referred any matter dealing with harbor planning, design, engineering or construction; budgets; intergovernmental relations; the Harbormaster's Office; including but not limited to, staffing; training; vessels and equipment; work and educational programs; fees and fines. In matters of safety, the committee shall be referred to any matter dealing with: enforcement of boating laws and regulations; other enforcement activities including the need and nature of police patrols during various times of the year and during special waterfront events; fire prevention and suppression needs; hazardous materials; emergency medical services; hazards to navigation; rules and regulations regarding use of the City's waterways; City Ordinances dealing with the waterways or waterfront; and any other matter deemed appropriate by the Board. This Committee shall consist of three (3) members of the Board and an advisory member from the City Council, and the Fisheries Commission as needed for matters concerning operations and finance. For matters of safety, the three (3) Board members shall be advised as needed by the Chief of Police or his designee, the City Fire Chief or his designee, and by a representative of Coast Guard Station Gloucester.

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CITY OF GLOUCESTER
HARBORMASTER'S OFFICE

RECEIVED

NOV 19 2010

Mayor's Office

Memorandum

From: Jim Caulkett, Harbormaster
To: Mayor Carolyn Kirk
Date: November 19, 2010
Subject: Mayor's Report to Council

Mayor Kirk,

In your next Report to Council, Ordinances and Administration Committee will you please include the attached proposed changes to Gloucester City Ordinance Chapter 10, Waterways Administration.

If you have any questions please feel free to contact me.

Sincerely,

Jim Caulkett

Proposed changes to City of Gloucester Code of Ordinances
Chapter 10

Change all reference of "public marina" to "city owned commercial marina"

In the following sections of Chapter 10 Gloucester City Ordinance

Article I Section 10-3 (b) (c) (d)

Article I Section 10-4 (c)

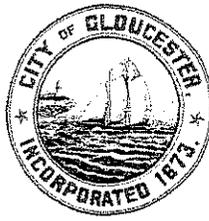
Article I Section 10-5 (b) (1) d

Article II Section 10-22 (l)

Article III Section 10-40 (d)

Article IV Heading

Article IV Section 10-54 Heading



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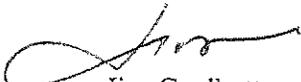
Mayor's Office

Mayor Kirk,

In your next Report to Council, Ordinances and Administration Committee will you please include the attached proposed changes to Gloucester City Ordinance Chapter 10, Article I, Section 10-1, Waterways Administration.

If you have any questions please feel free to contact me.

Sincerely,


Jim Caulkett

Proposed changes to City of Gloucester Code or Ordinances
CHAPTER 10 ARTICLE I. MANAGEMENT
Sec. 10-1. Waterways board.

EXISTING

Sec. 10-3. Authority and responsibilities.

The Gloucester Waterways Board is hereby empowered, and authorized to:

- (a) Promote implementation of the City of Gloucester Harbor Plan, dated 1992, and, in cooperation with the appropriate city bodies, amend said plan from time-to-time as circumstances warrant;
- (b) Establish policies, rules and regulations for the use of Gloucester's waterways and waterfront facilities, including but not limited to, mooring areas, public launch ramps, public landings, and public marinas;
- (c) Recommend to the city council fee schedules for moorings, launch ramps, slips at public marinas, and other waterfront public facilities and a schedule of fines for violation of waterways rules and regulations;
- (d) Oversee the operation and maintenance of all public launch ramps and related facilities, the public Lobster Marina at St. Peter's Square, and all other public marinas, landings, floats or access ramps;

PROPOSED

Sec. 10-3. Authority and responsibilities.

The Gloucester Waterways Board is hereby empowered, and authorized to:

- (a) Promote implementation of the City of Gloucester Harbor Plan, dated 1992, and, in cooperation with the appropriate city bodies, amend said plan from time-to-time as circumstances warrant;
- (b) Establish policies, rules and regulations for the use of Gloucester's waterways and waterfront facilities, including but not limited to, mooring areas, public launch ramps, public landings, and city owned commercial marinas;
- (c) Recommend to the city council fee schedules for moorings, launch ramps, slips at city owned commercial marinas, and other waterfront public facilities and a schedule of fines for violations of waterways rules and regulations;
- (d) Oversee the operation and maintenance of all public launch ramps and related facilities, the city owned commercial marinas and public landings, floats or access ramps;

- CHANGES:** Change all reference of "public marina" to "city owned commercial marina"
Remove reference to "St Peter's Square" and "all other public" and replace with "city owned commercial" marinas.
Add "s" to pluralize "violation"
Add "and public" before "landings" in last sentence.



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NOV 19 2010

Mayor's Office

Mayor Kirk,

In your next Report to Council, Ordinances and Administration Committee will you please include the attached proposed changes to Gloucester City Ordinance Chapter 10, Article IV, Section 10-51, Waterways Administration.

If you have any questions please feel free to contact me.

Sincerely,

Jim Caulkett

Proposed changes to City of Gloucester Code or Ordinances
CHAPTER 10 ARTICLE IV. MOORINGS, PUBLIC LANDINGS AND PUBLIC MARINAS
Sec. 10-51. Regulation of moorings.

Existing...

- (c) *Applications.* Applications for new permits shall be submitted between January 1 and April 15, on numbered forms provided by the harbormaster. Applicants shall be placed on waiting lists by location preferred, in order of the of their receipt. The harbormaster shall keep the waiting lists updated and shall post them publicly at the harbormaster's office and at the city clerk's office.

(c) The Harbormaster shall keep the waiting list updated and shall post the lists(s) publicly at the harbormaster's office and at the city clerk's office. (Ord. 04-14 DELETE 08/10/04)

(c) *The Harbormaster shall keep the waiting lists updated by requiring applicants to file before December 31st of each year his/her annual renewal to maintain his/her position on the waiting lists.*

The fee for such renewals shall be \$10.00. Failure to timely file the annual renewal shall result in the applicant's removal from the waiting list, ,provided however that an applicant may, prior to March 1st of the following year request reinstatement to his/her previous position on the waiting lists by filing with the Harbormaster a request for reinstatement together with a late fee of \$50.00 for a total of \$60.00.

The Harbormaster shall publicly post the waiting lists at the Harbormaster's Office and shall file a copy of same with the City Clerk's Office on April 30th of year. (Ord. 04-15 8/10/04)

Proposed...

- (c) *Applications* Applications for new permits shall be submitted on forms provided by the Harbormaster. Applicants shall be placed on waiting lists by location preferred, in order of their receipt. The Harbormaster shall keep the waiting lists updated by requiring applicants who wish to maintain their position on the waiting list to file an annual renewal prior to the last business day of December of each year. The Harbormaster shall publicly post the waiting lists at the Harbormaster's office and shall file a copy of same with the City Clerk's office on April 30th of each year.

The fee for such renewals shall be \$10.00. Failure to timely file the annual renewal shall result in the applicant's removal from the waiting list, ,provided however that an applicant may, prior to the last business day of February of the following year, request reinstatement to his/her previous position on the waiting lists by filing with the Harbormaster a request for reinstatement together with a late fee of \$50.00 for a total of \$60.00.

Changes:

Removed the January and April date references and the word "numbered".
Removed the typo "of the" after "in order".
Re-worded clause with December 31 requirement.
Change specific dates to "prior to last business day of..."
Added "each" in last sentence of first paragraph
Moved fee paragraph to end.

Proposed changes to City of Gloucester Code or Ordinances
CHAPTER 10 ARTICLE IV. MOORINGS, PUBLIC LANDINGS AND PUBLIC MARINAS
Sec. 10-51. Regulation of moorings.

Existing...

- (d) *Types of moorings.* The harbormaster may issue permits for three (3) types of moorings:
Personal moorings for sole use by the single vessel of an individual and his or her immediate family;
Public moorings which may be approved by the waterways board for public purposes; and
Transient moorings which may be used by waterfront businesses or yacht clubs for transient vessels.

Proposed...

- (d) *Types of moorings.* The harbormaster may issue permits for three (3) types of moorings:
Personal moorings for sole use by the single vessel of an individual and his or her immediate family;
City moorings which may be approved by the waterways board for public purposes; and
Transient moorings which may be used by waterfront businesses or yacht clubs for transient vessels.

Change: Change "Public" to "City"

Existing...

- (e) *Fees.* The fee for each type of mooring shall be established by the city council. Fees for personal moorings shall be charged by the length of vessel at the rate of four dollars (\$4.00) per foot for Gloucester residents and taxpayers and at the rate of six dollars (\$6.00) per foot for non-residents. The fee for transient moorings shall be two hundred (\$200.00) each. A daily fee of twenty-five dollars (\$25.00) shall be charged every vessel that utilizes a public mooring, used for transient boats, operated by the harbormaster. Fee for 10A Float Permits shall be in the amount of \$50.00 per season. (Ord. 02-16 4/16/2002)
- (e) *A completed renewal application by each mooring permit holder shall be returned to the Harbormaster's office before February 28th of each year. Failure to do so will result in the mooring permit being revoked.*
However, such mooring holder may request reinstatement of such permit by filing a completed renewal application, including the regular fee per foot, plus a late fee of \$50.00, prior to May 31st of that same year. (Ord 04-15 ADDED TO ORIGINAL LANGUAGE OF (e) 8/10/04)

Proposed...

- (e) *Fees.* The fee for each type of mooring shall be established by the city council. Fees for personal moorings shall be charged by the length of vessel at the rate of four dollars (\$4.00) per foot for Gloucester residents and taxpayers and at the rate of six dollars (\$6.00) per foot for non-residents. The fee for transient moorings shall be two hundred (\$200.00) each. A daily fee of twenty-five dollars (\$25.00) shall be charged every vessel that utilizes a City mooring, used for transient boats, operated by the harbormaster. Fee for 10A Float Permits shall be in the amount of \$50.00 per season.

A completed renewal application by each mooring permit holder, including the renewal fee and proof of ownership, shall be returned to the Harbormaster's office on or before the last business day in February of each year. After that time the mooring holder may renew the permit by filing a completed application, including the regular fee per foot, plus a late fee of \$50.00, prior to the last business day of May of that same year. Failure to do so will result in the mooring permit being revoked

Proposed changes to City of Gloucester Code or Ordinances
CHAPTER 10 ARTICLE IV. MOORINGS, PUBLIC LANDINGS AND PUBLIC MARINAS
Sec. 10-51. Regulation of moorings.

Changes:

First paragraph:

Change "public" to "city"

Second paragraph;

Change "before February 28th" to " on or before the last business day in February"

Moved reinstatement clause to before revocation sentence

Changed "prior to May 31st" to "prior to the last business day of May"

Chapter 10 WATERWAYS ADMINISTRATION*

*Editor's note--Ord. No. 17-1993, adopted Dec. 14, 1993, amended former Ch. 10, Arts. I--III, relative to the harbor and related waters, in its entirety to read as herein set out. The substantive provisions of former Ch. 10 derived from Code 1970. Sections 4-3, 10 $\frac{1}{2}$ -17--10 $\frac{1}{2}$ -25, 10 $\frac{1}{2}$ -27, 10 $\frac{1}{2}$ -29, 12-8, 12-18--12-21, 16-14, 16-16; and ordinances of Dec. 6, 1977; Jan. 10, 1978; Nov. 4, 1979; Feb. 3, 1983; Oct. 28, 1986; Aug. 4, 1987; Dec. 22, 1987; July 19, 1988; and April 4, 1989.

Cross reference(s)--Marshlands, Ch. 12; shellfish, seaworms and eels, Ch. 20.

State law reference(s)--Waterways, M.G.L.A. c. 91; provisions relating to Gloucester harbor, M.G.L.A. c. 102, §§ 3, 4; harbors and harbor masters, M.G.L.A. c. 102, § 17 et seq.

ARTICLE I. MANAGEMENT**Sec. 10-1. Waterways board.**

The purposes of the waterways board is to provide a broad-based citizen management organization that guides the use and development of Gloucester's waterways and public waterfront facilities. The waterways board shall be the city body which establishes policies and regulations for Gloucester's waterways. It is intended that the board adopt clear, concise and fair policies and regulations that promote improved access to the water for all citizens, including commercial fishermen, business owners and recreational boaters. In cooperation with the harbor master and other city staff, the board is intended to ensure that our waterways are well planned and maintained, utilized to the maximum extent possible, safe, and reflect positively upon the City of Gloucester.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-2. Composition and term.

(a) *Composition.* The Gloucester Waterways Board shall consist of seven (7) citizens of Gloucester, appointed by the mayor and confirmed by the city council. The appointees shall include three (3) persons who are directly involved with the fishing industry, two (2) persons who are recreational boaters, and two (2) persons, at large, who need not be involved with any marine-related activity. The board shall observe Robert's Rules of Order, shall annually select a chairman from its membership and establish its rules of procedure. The board shall have non-voting advisory members, as set forth in section 10-4 herein.

(b) *Term.* The term of all members shall be three (3) years except that the initial terms shall be staggered so that the terms of no more than three (3) members shall terminate in any one year. If a member resigns or is removed for any reason before his or her term expires, the mayor shall appoint a replacement within one (1) month of the vacancy. Said appointment must be confirmed by the city council. Members of the waterways board and its standing committees shall be volunteers who are not compensated.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-3. Authority and responsibilities.

The Gloucester Waterways Board is hereby empowered, and authorized to:

(a) Promote implementation of the City of Gloucester Harbor Plan, dated 1992, and, in cooperation with the appropriate city bodies, amend said plan from time-to-time as

circumstances warrant;

- (b) Establish policies, rules and regulations for the use of Gloucester's waterways and waterfront facilities, including but not limited to, mooring areas, public launch ramps, public landings, and public marinas;
- (c) Recommend to the city council fee schedules for moorings, launch ramps, slips at public marinas, and other waterfront public facilities and a schedule of fines for violation of waterways rules and regulations;
- (d) Oversee the operation and maintenance of all public launch ramps and related facilities, the public Lobster Marina at St. Peter's Square, and all other public marinas, landings, floats or access ramps;
- (e) Review and oversee the work programs, budget, staffing, training, effectiveness, management techniques and policies of the harbormaster's office and related city staff;
- (f) Work cooperatively with the harbormaster's office and related city staff on harbor management issues, enforcement of waterways rules and regulations and waterways development projects;
- (g) Review all waterfront development projects or zoning changes and report its findings and recommendations to the mayor, city council or other relevant board. The waterways board may required drawings, plans or other supporting documentation from project proponents for its review;
- (h) Act as the policy liaison between the City of Gloucester and the Army Corps of Engineers, U.S. Coast Guard, the State Department of Environmental Protection, the Massachusetts Office of Coastal Zone Management and other government agencies concerned with waterways;
- (i) Work with the harbormaster's office and related city staff to plan, design and undertake new projects such as dredging, mooring fields and access facilities;
- (j) Plan and encourage the development of signage and facilities for transient boaters and promote Gloucester as a well-equipped and hospitable port-of-call;
- (k) Work cooperatively with the harbormaster's office, police and fire departments, environmental police and other public safety agencies to ensure that Gloucester's waterways policies, rules and regulations and operating practices will protect the rights and property of waterways users and waterfront land owners, while maximizing public safety;
- (l) Delegate any of its responsibilities to a standing committee, the harbormaster or other staff person assigned by the mayor;
- (m) Investigate new sources of revenue for waterways management and development.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-4. Standing committees.

- (a) *Designation.* There shall be three (3) advisory standing committees of the waterways board, appointed by the chairman; a waterways safety committee; a public facilities committee; and an operations and finance committee. The committees shall review, research, investigate and make recommendations on matters referred to them by majority vote of the full board. The committees shall send their reports and recommendations only to the full board which shall review them and take appropriate action. The harbormaster shall be an ex-officio member of each committee. Every member of the board except the chairman shall be on at least one

standing committee, and each committee shall elect its own chairman.

(b) *Waterways safety committee.* This committee may be referred any matter dealing with: enforcement of boating laws and regulations; other law enforcement activities including the need and nature of police patrols during various times of the year and during special waterfront events; fire prevention and suppression needs; hazardous materials, emergency medical services; hazards to navigation; rules and regulations regarding use of the city's waterways; city ordinances dealing with the waterways or waterfront; and any other matter deemed appropriate by the board. This committee shall consist of: two (2) members of the board; the police and fire chiefs or their designees; and a representative of Coast Guard Station--Gloucester.

(c) *Public facilities committee.* This committee may be referred any matter dealing with moorings; public launch ramps, including Dun Fudgin; public landings; public marinas, including the Lobster Marina at St. Peter's Square; signage; public access, including but not limited to, walkways to the water, access ramps and floats and dinghy floats, sewage pump-out facilities, waste oil recycling facilities; harbormaster floats and offices; and any other matter deemed appropriate by the board. This committee shall consist of: two (2) members of the board; an advocate of public landings appointed by the mayor; the director of public works, or his designee; and a member of the tourist commission.

(d) *Operations and finance committee.* This committee may be referred any matter dealing with harbor planning, design, engineering or construction; budgets; intergovernmental relations; the harbormaster's office, including but not limited to, staffing, training, vessels and equipment, work and education programs; fees and fines; and any other matter deemed appropriate by the board. This committee shall consist of: two (2) members of the board; a member of the fisheries commission and a member of the city council.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-5. Relationship to the harbormaster and city staff.

(a) The waterways board shall work cooperatively with the harbormaster and other assigned city staff to implement the City of Gloucester Harbor Plan, as amended, and pursue the policies and goals of the board. In addition, the harbormaster and the board shall work together closely to ensure that the harbormaster's office is efficient, effective, and fair to all waterway users through review of work programs, plans operating procedures and budgets.

(b) The waterways board shall work cooperatively with the harbormaster and other assigned city staff including police officers, such that the following duties are performed by the designated official or employee.

(1) *Harbormaster:*

- a. Operate, maintain, manage equipment and vessels assigned (harbormaster boat).
- b. Assign and oversee moorings.
- c. Coordinate with and report to waterways board--Meetings, staff, grants, etc.
- d. Operate and manage public launch ramps, landings, marinas and other public waterways facilities around the city.
- e. Gather information and make recommendations relative to the harbor--Commissioner's line, Chapter 91, permits, CZM regulations and other waterways issues.
- f. Promote Gloucester as a hospitable port of call--Provide information to visitors, provide water transport as directed by the mayor.

- g. Manage and maintain a harbormaster's office.
- h. Report to the mayor on administrative matters; report to board on policy matters.

(2) *Police department:*

- a. Enforce all Massachusetts Commonwealth laws while patrolling the city waterways.
- b. Operate, maintain and manage equipment and vessels assigned (police boat/fire boat).
- c. Investigate, prosecute criminal activity on waterways and waterfront in cooperation with other members of the Gloucester Police Department and other law enforcement agencies, USCG, etc.
- d. Make arrests on water.
- e. Report to the chief of police.
- f. Assist the fire department, US Coast Guard with fire prevention and suppression, law enforcement, hazardous materials investigations and emergency medical services.
- g. Check on lobster violations under the city ordinance and State Laws. Enforce MGL Chapter 130, Sections 31, 17, 18, 18a, 39, 41, 41a, 43, 44--Marine fisheries laws: Destruction of weir-fish trap; lobster and crab licenses; markings on buoys--exhibition of license; display of license numbers and buoy colors; hours of tending traps; taking of female lobsters with eggs; possession of short lobsters.
- h. Check properties on islands not accessible from land.

(3) *Joint duties:*

- a. Enforce waterways laws, ordinances and rules and regulations (MGL Chapter 40, Section 21D (Fines and Ticketing) and Gloucester Code section 1-15 and MGL Chapter 90B, Sections 1--19 (Motorboats and other vessels) and other enforcement per MGL Chapter 102, Sections 17--28 (Shipping and Seaman, Harbor and Harbormasters).

Police: Plus all other applicable city and state laws.

- b. Patrol city waterways.

Police: Enforce all Massachusetts laws.

- c. Respond to emergencies within scope, training and resources.
- d. Operate, maintain and manage equipment and vessels assigned (police boat/fire boat--police; harbormaster boat--harbormaster).
- e. Coordinate with other agencies and assist within scope, training and resources.
- f. Observe water quality, assist appropriate agencies.
- g. Assist in keeping navigation channels clear, keep harbor free of debris.

Harbormaster: Primary responsibility.

- h. Patrol major events to promote and protect public safety--Fiesta, 4th of

July, Schooner Races, etc.

Police: Other occasions as directed by chief of police.

- i. Issue citations on water.
- j. Enforce the BWI, make arrests and bring complaints to court.

(Ord. No. 17-1993, 12-14-93; Ord. No. 21-1995, § I, 3-7-95)

Cross reference(s)--Police duties and joint duties concerning harbor management, § 17-1.

Secs. 10-6--10-19. Reserved.

ARTICLE II. ENFORCEMENT

Sec. 10-20. Harbormaster appointment, qualifications and authority.

((a) *Appointment.* In accordance with M.G.L.A. c. 102, § 19, the harbormaster shall be appointed annually by the mayor after joint interviews and consultation with the waterways board, and confirmed by the city council. Ord. 02-50 Deleted 11/12/2002) The mayor shall fix the compensation of the harbormaster after an annual performance review conducted by the board and the mayor or his designee. The harbormaster shall report to the mayor on administrative matters and to the waterways board on policy matters.

(a) *Appointment.* In accordance with M.G.L.A. c. 102, § 19, the harbormaster shall be appointed for a term of three (3) years by the mayor after joint interviews and consultation with the waterways board, and confirmed by the city council. (Ord. 02-50, 11/12/2002) The mayor shall fix the compensation of the harbormaster after an annual performance review conducted by the board and the mayor or his designee. The harbormaster shall report to the mayor on administrative matters and to the waterways board on policy matters.

(b) *Qualifications.* The harbormaster shall possess the following skills, knowledge or experience: small boat handling in heavy weather; navigation; rules of the road; waterways laws, rules and regulations and their enforcement; budget preparation; and staff management. Desirable skills or knowledge include water safety and life-saving; marine fire prevention and suppression; emergency medical care at the EMT level; waterfront construction techniques; the waterways permitting process; waterfront facilities management; water pollution control techniques and grant writing.

(c) *Authority.* The harbormaster shall have all authority set forth in: the Massachusetts General Laws, including but not limited to Chapters 102, 90B and 91; the Code of Massachusetts Regulations; applicable federal laws and regulations; and the City of Gloucester Code of Ordinances.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-21. Fines.

The harbormaster and assistant harbormasters shall have the authority to enforce any section of this chapter by way of the ticketing procedures set forth in Massachusetts General Laws, c. 40, § 21D and Gloucester Code of Ordinances, Section 1-15. Each day of violation shall constitute a separate offense.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-22. Responsibilities.

The harbormaster shall be responsible for the following tasks unless otherwise assigned by the mayor:

- (a) Enforce all laws, ordinances and rules and regulations within the authority set forth above;
- (b) Patrol all waterways within the city's jurisdiction during the entire year with more intense patrolling from May first to November first, and provide a continuous radio watch during patrol hours;
- (c) Respond to all emergencies on Gloucester's waterways, and provide all reasonable assistance within the scope, training and resources provided;
- (d) Operate, maintain and manage vessels and related equipment used for harbor patrols;
- (e) Assign and oversee all moorings in the city's waterways;
- (f) Cooperate with, and report to, the waterways board and its committees by: attending all board meetings; providing staff, technical support and advice; preparing reports and other documents, including budget proposals and grant applications; representing the commission; and enforcing the board's policies, rules and regulations;
- (g) Cooperate with other boards, commissions and other departments, including but not limited to, the Fisheries, Conservation, and Tourist Commissions, and the Community Development and Public Works Departments;
- (h) Assist the Gloucester Fire Department, U.S. Coast Guard and other relevant agencies with fire prevention and suppression, law enforcement, hazardous materials, investigations and management, and emergency medical services by providing technical and staff assistance, sharing information, joint training, and the loaning of vessels and equipment for operations or investigations;
- (i) Operate and manage the maintenance of all public launch ramps, public landings, public marinas and other public waterways facilities owned by the City of Gloucester;
- (j) Observe the water quality of all waterways, take immediate steps to stop or contain pollution on an emergency basis, notify appropriate government agencies, and enforce all relevant city ordinances;
- (k) Monitor and clear navigation channels and prevent encroachments beyond the harbor commissioner's line;
- (l) Promote Gloucester as a hospitable port-of-call for transient boaters by advertising the city's facilities, welcoming visiting boaters, and providing them with directions, technical assistance and advice as they operate on the city's waterways;
- (m) Conduct educational programs that teach all boaters safe boating practices, rules of the road, hazardous areas of local waters, and the value of Gloucester's waterways.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-23. Relocation of vessels.

(a) *Harbormaster's authority.* The harbormaster may station and regulate all vessels in Gloucester waterways and may remove any vessel to new location, or cause it to be so removed, if in his or her judgement any one of the following circumstances exists:

- (1) If the vessel is improperly or illegally moored as described in section 10-51

herein;

(2) If a vessel occupying a berth at a wharf or pier is not removed within a reasonable period after notice from the owner of said wharf or pier to the master or owner of said vessel, and wharf or pier owner makes a complaint to the harbormaster; and

(3) If a vessel not discharging cargo or receiving cargo or services stands in the way of another vessel waiting to carry out any of these activities and the master or owner of the latter vessel complains to the harbormaster.

(b) *Removal at expense of owner.* The harbormaster may, at the expense of the master or owner thereof, cause the removal of any vessel which is not moved when directed by him or her. Upon the neglect or refusal of any such master or owner to pay on demand the expense of such removal, the harbormaster may recover the same from the master or owner in contract for use of the city. If the master or owner of the vessel cannot be found or located within the jurisdiction of the harbormaster, the harbormaster may proceed in rem directly against the vessel.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-24. Harbormaster's office.

(a) *General.* There shall be a division within the city named the harbormaster's office. It shall be managed by the harbormaster and assist in the carrying out of his or her duties as well as those of the waterways board. The harbormaster's office shall have an annual operating budget and shall prepare an annual report. The harbormaster shall ensure that all staff members are adequately trained for their jobs, especially those that include boat operation.

(b) *Permanent staff.* The harbormaster's office shall have a small, permanent staff to assist in the operation and maintenance of records, boats, equipment, and public facilities.

(c) *Seasonal staff.* The harbormaster's permanent staff may be augmented by seasonal personnel who may be used for such tasks as safety patrols, launch ramp operation, mooring fee collection, and maintenance and repairs.

(d) *Assistant harbormasters.* In accordance with M.G.L.A. c. 102, § 19, the mayor, upon the recommendation of the harbormaster, may appoint permanent or seasonal staff as assistant harbormasters. Such assistants shall be subject to the direction and control of the harbormaster and shall have all authority given to, and be subject to all the duties required of harbormasters, assistant harbormasters shall receive no stipends.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-25. Budgeting.

The annual budget of the harbormaster's office shall include all operating expenses of the waterways board such as legal advertising. The budget shall be developed by the harbormaster in consultation with the operations and finance committee of the waterways board and shall be approved by the full board before it is transmitted to the mayor. The board shall assist the harbormaster at budget reviews by the mayor and city council. The budget shall not exceed the projected revenues of the Waterways Enterprise Fund.

The harbormaster, in consultation with the public facilities committee of the waterways board, shall prepare and submit project descriptions, justifications and budgets to the capital improvements advisory board for any applicable waterway project to be funded by the Waterways Enterprise Fund. The waterways board shall assist the harbormaster during project reviews.

(Ord. No. 17-1993, 12-14-93)

Secs. 10-26--10-39. Reserved.

ARTICLE III. WATERWAYS FUNDING

Sec. 10-40. Waterways enterprise fund.

(a) *Creation.* In accordance with M.G.L.A. §§ 5(72) and 39K, there shall be a Waterways Enterprise Fund. Said fund shall be used to support the operations of the waterways board and all waterways management and enforcement activities, including the purchase of equipment, the planning, design and construction of public waterways facilities, such as mooring fields, ramps, piers and pump-out facilities. The fund shall have two (2) distinct accounts each of which shall receive a portion of the receipts listed in section 10-40(d) herein.

(b) *Waterways management account.* Funds from this account shall be used for management and enforcement operating expenses as well as for equipment and repairs which do not have to be included in the city's capital improvements program. The funds from this account shall be managed by the mayor in cooperation with the waterways board and harbormaster.

(c) *Waterway improvements account.* Funds from this account shall be used for purchase of vessels, large equipment and the planning, design, construction or major repair of any public waterway facility. As required, expenditures from this account shall be included in the city's capital improvements program. This account shall be managed by the mayor in cooperation with the waterways board and harbormaster.

(d) *Receipts.* The Waterways Enterprise Fund shall receive the following receipts: mooring fees, both annual and transient; dockage and slip fees from public marinas, launch ramp fees; all boat excise taxes; fines; and any other income derived from public waterways facilities including dedicated grants or gifts.

(Ord. No. 17-1993, 12-14-93)

Secs. 10-41--10-49. Reserved.

ARTICLE IV. MOORINGS, PUBLIC LANDINGS AND PUBLIC MARINAS

Sec. 10-50. Definitions.

In construing the provisions of this article, the following words shall have the meanings given below unless a contrary intention clearly applies:

(a) *Gloucester waterways:* All tidal waters within the boundaries of the city, its harbors, bays and coves, and the whole of the Annisquam River and its outlets, coves and bays;

(b) *Harbormaster:* That city official duly appointed in conformance with section 10-20, herein;

(c) *Public landing:* Any area including uplands, ramps, floats, wharfs, piers, parking areas and water that has been set aside by the city for the landing of vessels to discharge or take on passengers or supplies, or for the launching of vessels, and for public access and recreation as set forth in M.G.L.A. c. 88, § 14;

(d) *Mooring:* A relatively permanent arrangement of an anchor, chain and floating buoy to which a vessel may be tied for extended periods;

- (e) *Permittee*: A person to whom a permit has been granted for landing or mooring;
- (f) *Public waters*: All waters beyond the mean low water mark;
- (g) *Recreational vessel*: A vessel used for personal, non-commercial enjoyment, recreation or sport;
- (h) *Recreational boater*: An individual who owns and/or operates a recreational vessel;
- (i) *Vessel*: Shall include ships, boats, steamers, barges, or any other type of watercraft powered or under sail or tow, as well as such floating structures as buoys and rafts;
- (j) *Vessel length*: for the purposes of determining the amount of the mooring fee, the length overall (LOA) of a vessel exclusive of bowsprits, main boom, and boomkins. For the purposes of mooring assignments, the length shall include bowsprits, main boom and boomkins.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-51. Regulation of moorings.

- (a) *Regulations*. The waterways board shall make regulations regarding the application process, size, type, construction and placement of all moorings within Gloucester waterways. All moorings shall be placed under the direction of the harbormaster and are subject to inspection by the harbormaster prior to their initial placement and at intervals of three (3) years.
- (b) *Permits*. No person shall establish a mooring within Gloucester waterways without first obtaining a permit from the harbormaster to do so. Mooring permits shall be renewable each calendar year.
- (c) *Applications*. Applications for new permits shall be submitted between January 1 and April 15, on numbered forms provided by the harbormaster. Applicants shall be placed on waiting lists by location preferred, in order of the of their receipt. The harbormaster shall keep the waiting lists updated and shall post them publicly at the harbormaster's office and at the city clerk's office.
- (c) The Harbormaster shall keep the waiting list updated and shall post the lists(s) publicly at the harbormaster's office and at the city clerk's office. (Ord. 04-14 DELETE 08/10/04)
- (c) *The Harbormaster shall keep the waiting lists updated by requiring applicants to file before December 31st of each year his/her annual renewal to maintain his/her position on the waiting lists.*
- The fee for such renewals shall be \$10.00. Failure to timely file the annual renewal shall result in the applicant's removal from the waiting list, provided however that an applicant may, prior to March 1st of the following year request reinstatement to his/her previous position on the waiting lists by filing with the Harbormaster a request for reinstatement together with a late fee of \$50.00 for a total of \$60.00.*
- The Harbormaster shall publicly post the waiting lists at the Harbormaster's Office and shall file a copy of same with the City Clerk's Office on April 30th of year. (Ord. 04-15 8/10/04)*
- (d) *Types of moorings*. The harbormaster may issue permits for three (3) types of moorings:
 - Personal moorings* for sole use by the single vessel of an individual and his or her immediate family;
 - Public moorings* which may be approved by the waterways board for public purposes; and

Transient moorings which may be used by waterfront businesses or yacht clubs for transient vessels.

(e) *Fees.* The fee for each type of mooring shall be established by the city council. Fees for personal moorings shall be charged by the length of vessel at the rate of three dollars (\$3.00) per foot for Gloucester non-residents. The fee for transient moorings shall be two hundred dollars (\$200.00) each. A daily fee of twenty dollars (\$20.00) shall be charged every vessel that utilizes a public mooring, used for transient boats, operated by the harbormaster. Ord. 02-16 Delete 4/16/02)

(e) *Fees.* The fee for each type of mooring shall be established by the city council. Fees for personal moorings shall be charged by the length of vessel at the rate of four dollars (\$4.00) per foot for Gloucester residents and taxpayers and at the rate of six dollars (\$6.00) per foot for non-residents. The fee for transient moorings shall be two hundred (\$200.00) each. A daily fee of twenty-five dollars (\$25.00) shall be charged every vessel that utilizes a public mooring, used for transient boats, operated by the harbormaster. Fee for 10A Float Permits shall be in the amount of \$50.00 per season. (Ord. 02-16 4/16/2002)

(e) A completed renewal application by each mooring permit holder shall be returned to the Harbormaster's office before February 28th of each year. Failure to do so will result in the mooring permit being revoked.

However, such mooring holder may request reinstatement of such permit by filing a completed renewal application, including the regular fee per foot, plus a late fee of \$50.00, prior to May 31st of that same year. (Ord 04-15 ADDED TO ORIGINAL LANGUAGE OF (e) 8/10/04)

(f) *New mooring areas.* The waterways board may, after a public hearing, designate new mooring areas. Moorings in those areas may be installed, maintained and operated by the harbormaster's office or by private businesses under license from the waterways board. The selection process for private operators shall include requests for proposals by the waterways board, submission of proposals and bids in conformance with M.G.L.A. c. 30B, and review of proposals and bids consistent with that law.

(g) *Public chart.* The harbormaster shall maintain a chart which clearly indicates the location, permittee, LOA of each moored vessel, and number of moorings in Gloucester's waterways. A copy of this chart shall be publicly posted in the harbormaster's office and in the city clerk's office.

(h) *Suspension and revocation.* A mooring permit may be suspended or revoked by the harbormaster whenever, in his or her opinion, the vessel and/or mooring unduly threatens the safety of the mooring area or the reasonable use of that area by other vessels. Placing a mooring at a location other than that specified on the mooring permits will be grounds for revocation. Any person aggrieved by the action of the harbormaster in denying, revoking, suspending or imposing restrictions on a mooring permit may appeal the harbormaster's decision to the State Division of Waterways, provided the person files application for such appeal within thirty (30) days after receiving notice of the harbormaster's decision. Failure to fully pay vessel excise taxes for the previous fiscal year(s) shall be grounds for suspension or revocation;

(i) *Violations.* Whenever the harbormaster considers a mooring to be in violation of harbor regulations or to be a hazard to navigation, he or she may, after due notification of the owner, in person or by registered mail to the address of record, order the removal of the mooring, together with any vessel attached to it, to a new location. Such action may be taken without notification to or reply from an owner only, if in the determination of the harbormaster, the owner cannot be contacted within seventy-two (72) hours or if emergency conditions required immediate action. Any expenses incurred in the removal or relocation of such mooring or any damages resulting shall be the responsibility of the owner. Floats, rafts and moorings held by anchors or bottom

moorings, if installed in the public waters of the city without permission from the harbormaster, shall be considered a public nuisance, and may be removed by the harbormaster at the expense of the owner in the event he or she fails to remove same after notice in writing.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-52. Use of public landings.

(a) *General use.* All public landings, along with the ramps and floats attached thereto, shall be used primarily for the landing of people from vessels, the docking of vessels while people are alighting or boarding, and by persons tying their vessel thereto while making purchases ashore. Public landings shall also provide public access for passive recreational activities. Where public landings have no floats, vessels may be pulled up on shore for the purposes set forth above. Parking areas at public landings shall be for the exclusive use of landing users unless otherwise designated by the waterways board.

(b) *Tie-up period.* No owner nor anyone else in charge of or operating a vessel of any description, shall use the head of any float moored or attached to any public landing for any greater period of time than ordinarily and reasonable required to load or unload the passengers or occupants of any such vessel, together with whatever merchandise might accompany or be in the possession of the persons or passengers alighting therefrom. In no case shall any vessel be tied to the head of a public landing float for more than thirty (30) minutes except by permission of the harbormaster. However, dinghies, tenders and other auxiliary vessels less than twelve (12) feet in length, used by mooring holders or transient boaters, may be tied up at the sides of undedicated floats at public landings for up to four (4) hours while the owners thereof are purchasing goods and services. No such auxiliary vessel shall block the head of a float or interfere with permitted activities.

The harbormaster may permit the seasonal tie-up of dinghies, tenders or other auxiliary vessels less than twelve (12) feet in length at portions of any public landing so designated by the waterways board, provided that the fee set forth below has been paid. Such permitted vessel shall be marked by an official sticker on their transoms.

(c) *Conducting business or soliciting.* It shall be unlawful for any person to conduct any business, including vending on or from a public landing. The sale of tickets or the solicitation of passengers in any other manner for boat or fishing trips from any public landing is prohibited. However, any person operating a harbor sail, ferry, excursion vessel, vessel livery or party fishing vessel but maintaining a wharf headquarters or principal place of business elsewhere, may use a public landing as a point of call and may discharge or take on passengers. The vessels engaged in such ventures shall not lay at any float at a public landing longer than shall be ordinarily and reasonable necessary for their occupants, passengers or customers to board or alight therefrom, and shall not block or otherwise interfere with other permitted activities.

(d) *Other prohibited activities.* No person shall clean fish, or leave ropes, lobster pots, barrels, rocks, bricks, boards or any other material on any public landing, or launching ramps, floats or piers thereof, for longer than is reasonable necessary in the act of loading or unloading the same onto or from vessels, unless authorized by the harbormaster. No person shall load or unload lobster pots, bait, or other gear on or from any public landing, or floats, wharfs or piers thereof, except those designated by the waterways board. No vessels, vehicles or trailers may be stored on any public landing.

(e) *Encroachment.* No person shall encroach upon a public landing in any way.

(f) *Restrictions on hours.* Stone Pier and Long Wharf shall be closed to prohibit all activities between the hours of 10:00 p.m. and 4:00 a.m. Any use of this area between the prohibited hours shall constitute trespassing, a violation of City of Gloucester, Code of Ordinances, section 14-6. Any person who violates said ordinance shall be subject to arrest under City of Gloucester, Code of Ordinances, section 14-6 and/or fined pursuant to section 1-14, City of

Gloucester, Code of Ordinances. The city will use reasonable and practicable means to inform the public of such curfew. Further, this section is not intended to conflict with or supersede the authority of the conservation commission or any rules enacted by them under their Massachusetts General Laws Chapter 40, Section 8C, Powers.

(g) *Fees.* The annual fee for the seasonal tie-up of dinghies, tenders or other auxiliary vessels, less than twelve (12) feet in length, at designated areas of public landings shall be fifty (\$50.00) dollars.

(Ord. No. 17-1993, 12-14-93; Ord. No. 16-1996, § J, 5-28-96; Ord. No. 6-1999, § I, 6-22-99)

Sec. 10-53. Use of public ramp at Dun Fudgin.

(a) *Fees.* The fees for launching vessels at the Dun Fudgin public access ramp shall be as follows:

Daily fee for all users except commercial boat haulers, per vessel launched . . . \$ 5.00

Season pass for any vessel up to and including 18' in length, per season . . . 35.00

Season pass for any vessel more than 18' in length, per season . . . 50.00

(Daily fee for commercial boat haulers, per vessel launched . . . 25.00 Ord. 02-17 Delete 4/16/2002)

(Daily fee for commercial boat haulers, per vessel launched . . . 50.00 (Ord. 02-17 4/16/2002) Ord. 03-25, Delete, 6/10/2003)

Daily fee for commercial boat haulers, per vessel launched . . . 35.00 (Ord. 03-25, 6/10/2003)

(Season pass for commercial boat haulers, per season . . . 250.00 Ord. 02-17 Delete 4/16/2002)

(Season pass for commercial boat haulers, per season . . . 500.00 (Ord. 02-17 4/16/2002)

Ord. 03-25, Delete, 6/10/2003)

Season pass for commercial boat haulers, per season . . . 350.00 (Ord. 03-25, 6/10/2003)

(b) Failure to pay fee as posted shall result in the issuance of a violation as specified in Sec. 10-21 and Sec. 1-15. (Ord. 03-25, 6/10/2003)

(Ord. No. 31-1997, § I, 3-4-97)

Sec. 10-54. Use of public marinas--Reserved.

Secs. 10-55--10-79. Reserved.

ARTICLE V. OTHER WATERWAY REGULATIONS

Sec. 10-80. Federal and state jurisdiction.

Nothing contained in this chapter shall be construed to conflict with the jurisdiction of the federal government with respect to enforcement of the navigation, shipping, anchorage, and associated laws of the United States, or any lawful regulation or law of the Commonwealth of Massachusetts and its agencies.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-81. Scuba and skin diving.

(a) *Driver's flag.* Scuba or skin divers within the Gloucester waterways shall display a diver's flag consisting of a white diagonal stripe on a red field not less than twelve by fifteen inches (12 X 15) in size. The flag shall be displayed upright on a float or similar device at a height sufficient to be seen by passing vessels. The diver shall trail this flag while submerged, unless the harbormaster grants permission to do otherwise, and shall surface within twenty-five (25) feet of the flag.

(b) *Distance from buoys.* The diver shall maintain a distance of at least twenty-five (25) feet and stay clear when vessels are hauling traps in the immediate area.

(c) *Prohibition.* The harbormaster may prohibit scuba or skin diving in areas within Gloucester waterways where such diving cannot, in the harbormaster's opinion, be carried out safely without undue inconvenience to vessel operations.

(d) *Beach regulations.* Scuba or skin divers must comply with beach regulations promulgated by the director of public works.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-82. Lobstering.

No lobstering by any method shall be allowed in designated mooring areas, or within the confines of harbor channels or travel lanes in and out of the city.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-83. Fishing vessels unloading fish.

Fishing vessels unloading fish, by use of open containers such as mesh or canvas baskets, at piers in the city, shall place a net of sufficient size and mesh between the vessel and the pier or wharf to prevent fish from falling into the harbor waters and polluting same.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-84. Demolishing a pier, wharf or building along the waterfront.

Anyone demolishing a pier, wharf or buildings adjacent to or extending into Gloucester's waterways shall install a boom around the pier, wharf or buildings for the purpose of containing debris, before commencing demolition. If said boom extends into navigable waters it shall display warning flags during daylight hours and warning lights during periods of darkness.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-85. Littering and pollution.

(a) *General prohibition.* No person shall throw or deposit, intentionally or otherwise, in Gloucester's waterways any litter, rubbish, filth, human waste, petroleum products, plastics, fuel or lubricating oil, fish oil or other greasy substance, dead animals or fish, fish waste, or any other foul or offensive substance. The term "litter" shall include, but not be limited to: bottles, glass, cans, wood, trash, tires, scrap metal, junk, paper, garbage, tuna heads, trees, brush and grass clippings.

(b) *Discharge of oils.* No land-based concern or vessel shall discharge, intentionally or otherwise, in Gloucester's waterways oil in any of its forms: animal; vegetable; or mineral.

(c) *Pumping enginerooms and bilges.* No owner, operator or crew member of a vessel located in Gloucester's waterways shall pump overboard engine room bilge water or engine compartment bilge water containing petroleum products or throw overboard any crankcase or lubricating oil or petroleum products except in extreme emergencies such as to prevent a vessel from sinking.

(Ord. No. 17-1993, 12-14-93)

Sec. 10-86. Vessel operation.

(a) *Speed limit.* No vessel shall exceed five (5) miles per hour or cause a disturbing wake within the confines of mooring or anchorage areas and other areas posted by the harbor master.

(b) *Swimming areas.* No person shall operate a (power)-(deleted 05/12/2005) vessel including jet skis, within one hundred fifty (150) feet of any beach or swimming area without the permission of the harbor master.

(c) No vessel or watercraft shall be launched, landed or operated on life guarded public beaches. (Ord # 05-13 05/12/2005)

(d) *Water skiers, aquaplanes, etc.* No person shall operate a vessel towing water skiers, aquaplanes or similar devices within three hundred (300) feet of any beach or swimming area.

(e) *Operation near scuba or skin divers.* No person shall operate a power vessel in excess of three (3) miles per hour when within one hundred (100) feet of a diver or his flag or marker. No person shall operate a power vessel within fifty (50) feet of a diver or his flag or marker unless said vessel is being operated by a person identified with, working with, or rendering assistance to such scuba or skin diver.

(Ord. No. 17-1993, 12-14-93)

Chapter 11 HAWKERS AND PEDDLERS, AND TRANSIENT VENDORS*

***Editor's note**--Ord. No. 54-96, § I, adopted Dec. 10, 1996, amended former Chapter 11, §§ 11-1--11-10, in its entirety to read as herein set out. Former Ch. 11 pertained to similar subject matter and derived from Ord. of 8-5-83, §§ 23-1--23-9; Ord. of 4-11-89, § I; Ord. No. 24-1991, § I, 7-9-91; Ord. of 4-27-92, § I; Prior to the adoption of No. 54-96, uncodified Ord. Nos. 27-95, § I, adopted 4-18-95; and 44-95, § I, adopted 11-14-95 amended the chapter in its entirety.

Cross reference(s)--Sale, distribution of "silly string" prohibited, § 14-12; secondhand goods, Ch. 19; streets, sidewalks and other public places, Ch. 21.

State law reference(s)--Transient merchants, hawkers and peddlers, M.G.L.A. c. 101, § 1 et seq.

ARTICLE I. IN GENERAL

Sec. 11-1. Definitions.

Hawker and peddler: A "hawker", "peddler", (or solicitor), is defined as any person who, for himself, or for another person, firm or corporation travels by foot, automobile, or any other type of conveyance, town to town or place to place in the same town, taking or attempting to lease or take orders for retail sale of goods, wares, merchandise, or services including, but without limiting, the selling, distribution, exposing for sale or soliciting orders for magazines, books, periodicals or other articles of any nature, the contracting of all home improvements, or for services to be performed in the future whether or not such individual has, carries or exposes for retail, sample of the subject of such



**CITY OF GLOUCESTER 2011
CITY COUNCIL ORDER**

ORDER:	#CC2011-006
Councillor	Ann Mulcahey

DATE RECEIVED BY COUNCIL:	02/08/11
REFERRED TO:	O&A
FOR COUNCIL VOTE:	

ORDERED that the Code of Ordinances Chapter 21 "Streets" be amended by adding a new section 21-18(b) to provide that private plow contractors, who plow private commercial or residential property, must obtain a snow plow operator permit from the City DPW, with a fee determined and approved by the City Council, and are prohibited from leaving plowed snow on sidewalks, fire hydrants or driveway entrances.

Ann Mulcahey
Councillor - Ward 2

City Hall
Nine Dale Ave
Gloucester, MA 01930



TEL 978-281-9700
FAX 978-281-9738
ckirk@gloucester-ma.gov

CITY OF GLOUCESTER
OFFICE OF THE MAYOR

February 4, 2011

H. Curtis Spaulding
Regional Administrator
United States Environmental Protection Agency, Region 1 New England
5 Post Office Square
Boston, MA 02109-3912

RE: Public Comment: Tentative 301(h) Waiver Decision Document; Draft NPDES Permit

Dear Mr. Spaulding,

Thank you for extending the public comment period for the city of Gloucester pertaining to EPA's decision to deny our 301(h) waiver request and on the draft NPDES permit. As our letter of January 5, 2011 stated, we continue to be of the belief that the two issues are very different in nature, and the structure of our public comment represents that belief.

In this initial submission, we are providing detailed requirements only regarding the denial of the 301(h) waiver, and the consequences of the denial on the city's and citizen's ability to afford expensive secondary treatment that provides no appreciable environmental benefit. In advance of the public hearing currently scheduled for March 24, 2011, we will submit our detailed public comment regarding provisions of the draft NPDES Permit for secondary treatment.

City of Gloucester Summary – EPA Denial of the 301(h) Waiver Request

Enclosed you will find detailed technical, legal, scientific and financial arguments prepared by the city of Gloucester team. However, as the elected official compelled to represent the best interests of the citizens of Gloucester, I offer EPA this commentary:

- The ratepayers and taxpayers of the city of Gloucester have just made a \$35 million dollar investment in an EPA-mandated CSO project. In addition, the ratepayers and taxpayers of the city of Gloucester have also just made a \$20 million investment in the Waste Water Treatment Plant. Permanent financing for both these projects is just commencing and there is no debt relief for another 20 years. Rates would double from their already current high levels with secondary treatment expenses.

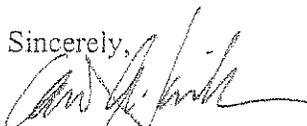
February 4, 2011

- As demonstrated in our comments, the Waste Water Treatment Plant satisfies the 301(h) criteria. The positive impacts of the CSO work and the Waste Water Treatment Plant upgrades are likely to improve the situation further, so it is premature at best to deny the waiver.
- The city of Gloucester acknowledges EPA's concerns about a lack of professional and consistent management over many years of our waste water system. However, we have recently switched contract operators, and together we have stabilized and made dramatic improvements to operations at the plant.
- The city of Gloucester needs an over-arching master asset plan. We cannot look at waste water issues in isolation. The ratepayers of Gloucester will also bear the \$15 million we have invested in our drinking water system over the past 18 months - with more urgent projects needed. We need for EPA to take the whole of Gloucester's infrastructure and ability to afford improvements into account. An asset master plan is a missing piece of the puzzle presently.
- From an environmental standpoint, we are asking EPA to look long and hard at the cost / benefit analysis of what we consider to be questionable environmental benefits vs. the enormous cost burden that would be placed on the city in order to provide secondary treatment. The 301(h) waiver that EPA has applied to the Gloucester water pollution control facility for the last 26 years is in complete accord with the letter and intent of the 301(h) provisions Congress put in the Clean Water Act for just the purpose in which Gloucester finds itself, as witnessed by the Congressional record:
 - *"There have been continuing increases in [the cost to construct secondary treatment]. In view of these factors, and in order to achieve needed savings in the cost of treatment of municipal wastes, the Committee considers it desirable to make the operation of ocean discharges available where it can be shown that unacceptable adverse environmental effects will not result."* See H.R. Rep. No. 97-270, at 17 (1981), reprinted in 1981 U.S.C.C.A.N. 2629, 2645.

As we have maintained all along throughout this ongoing dialogue, the city of Gloucester is committed to preserving and protecting the ocean resources that have played a major role in the history of the city, and which are a vital part of Gloucester's identity.

We are asking for a reasonable balance. With the city unable to assume additional debt for at least the next 20 years, we believe that the investment that we can make would better be spent on CSO control, stormwater management, and other wastewater infrastructure improvements that would provide real benefits to beaches, waterfronts, and neighborhoods in Gloucester. We hope that EPA agrees. Thank you.

Sincerely,


Carolyn A. Kirk
Mayor
City of Gloucester

Comments of the City of Gloucester

Regarding

Tentative Decision of the Regional Administrator under 40 C.F.R Part 125, Subpart G
(dated 11/5/2010)

Related to

**City of Gloucester, Massachusetts, POTW, NPDES Permit No. MA0100625,
Application for Modification of Secondary Treatment Requirements under Section 301(h)
of the Federal Clean Water Act, 33 U.S.C. § 1311(h)**

February 4, 2011

The City of Gloucester, Massachusetts ("Gloucester" or the "City") submits the following comments regarding the tentative decision of the EPA Regional Administrator to deny Gloucester's request for renewal of modification of Clean Water Act secondary treatment requirements for its Water Pollution Control Facility (WPCF).¹

I. INTRODUCTION

Section 301(h) of the federal Clean Water Act ("CWA" or "Act")² allows publicly owned treatment works discharging into marine waters to receive a variance from the Act's technology-based secondary treatment requirements for 5-day biochemical oxygen demand (BOD) and total suspended solids (TSS), as long as certain statutory criteria are met. This provision reflects Congress's determination that secondary treatment provides little environmental benefit for discharges to deep ocean waters, due to the rapid aeration and dispersion of such discharges.³

Pursuant to § 301(h), EPA granted a variance from secondary treatment requirements for Gloucester's WPCF in 1985 and renewed the variance in 2001. Both of these waivers were for the current treatment plant, which has design flows of 7.24 million gallons per day ("MGD") average and 15 MGD maximum. The current average monthly flow is 5.08 MGD.

In 1990, Gloucester relocated the discharge from the WPCF to a location in Massachusetts Bay, more than a mile beyond Gloucester Outer Harbor, through an outfall approximately 15,000 feet long. The effluent is discharged through a diffuser on the ocean floor into a water depth of 90 feet. The effluent receives chemically enhanced primary treatment and chlorination/dechlorination. The 2001 waiver reflected the extension of the plant's outfall to its current location.

¹ In Re: City of Gloucester, Massachusetts, Publicly Owned Treatment Works, NPDES Permit No. MA010065, Application for Modification of Secondary Treatment Requirements under Section 301(h) of the Federal Clean Water Act, 33 U.S.C. § 1311(h), Tentative Decision of the Regional Administrator Under 40 C.F.R. Part 125, Subpart G (November 5, 2010).

² 33 U.S.C. § 1311(h).

³ See discussion in EPA's preamble to the initial 301(h) regulations, 43 Fed. Reg. 17484 (April 25, 1978).

In 2006, the City submitted an application to EPA Region 1 for a renewal of its 301(h) variance. On November 5, 2010, the EPA Regional Administrator issued a tentative decision (the "tentative decision," or "TD") denying the variance.⁴ The denial is based on EPA's assertion that Gloucester has not demonstrated that it meets two of the nine 301(h) statutory criteria. EPA's tentative decision is not consistent with 301(h) regulations and guidance, or EPA's prior decisions regarding the WPCF. In fact, Gloucester's WPCF meets all of the 301(h) criteria as detailed below and EPA's tentative decision is therefore arbitrary and capricious, and not in accordance with the law.

II. DESCRIPTION OF THE TREATMENT FACILITY AND RECEIVING WATERS

II.A. The WPCF

Gloucester's WPCF began operation in 1984. In 1985 it was issued a 301(h) waiver and NPDES permit based on primary treatment. The plant was designed for an average daily flow rate of 7.24 million gallons per day (MGD) with a peak hydraulic flow rate of 15 MGD. The plant's average daily flow for the past five years is as follows:

Year	Average WPCF flow (MGD)
2010	4.27
2009	4.34
2008	4.49
2007	4.17
2006	4.69

The WPCF currently serves approximately 7,727 customers in Gloucester (6,928 residential households, 328 commercial facilities, 68 industrial facilities, and 777 mixed-use and public facilities). The industrial users include four permitted Significant Industrial Users and six permitted smaller users. The WPCF also serves approximately 600 households in Essex and 150 in Rockport (mostly seasonal use). The plant also receives trucked septage, sludge, and holding tank wastes from Gloucester and Essex. Some of the Gloucester flow is from combined sewers receiving both sanitary and stormwater flow.

The plant implements chemically enhanced primary treatment (CEPT), which uses ferric chloride and polymer to increase removal of oil and grease, BOD, and TSS. The effluent is chlorinated to eliminate bacteria, then dechlorinated to remove residual chlorine. The plant discharges effluent through a 15,690-foot outfall to a location approximately a mile beyond Dog Bar Breakwater (Figure 1) into 90 feet (27.4 m) of water. The effluent is discharged at the bottom of the water column through a 61-meter-long multiport diffuser with ten risers (Figures 2 and 3).

⁴ The public comment period was extended by EPA on December 16, 2010 to February 2, 2011, and then again through the date of the public hearing to be held in this matter, currently scheduled for March 24, 2010. See letter dated January 24, 2010 from Stephen S. Perkins, Director of Office of Ecosystem Protection, EPA Region 1 to Mayor Carolyn A. Kirk.

II.B. WPCF Improvements

Since EPA's 2001 renewal of the WPCF's 301(h) waiver, numerous improvements have been made to the WPCF. Improvements from 2004-2006, which included the addition of dechlorination in 2006, are summarized in EPA's tentative decision and not restated here.

In addition, the City is currently in the midst of a two-phase set of upgrades to the WPCF. Phase I construction began in January 2010, with substantial completion expected by March 31, 2011, at a cost of approximately \$6.5 million. Phase I improvements include:

- Replacement of the mechanisms and tank overflow for the two existing gravity thickeners and sludge holding tank. Installation of a new sludge holding tank mixing system and two new rotary sludge presses with a new polymer system, dewatering system control panel and dewatered sludge conveyors.
- Changes to process flow such that septage and scum will be pumped directly to the sludge holding tank where it will be thoroughly mixed with thickened primary sludge prior to dewatering.
- Replacement of all sludge and scum pumps including two primary sludge pumps, two primary scum pumps, two thickened primary sludge pumps, two thickened primary scum pumps and two sludge dewatering feed pumps. All pumps with the exception of the two thickened primary scum pumps are preceded by an in-line grinder.
- Replacement of the three plant effluent pumps with new higher capacity pumps and new variable frequency drives (VFDs).
- Electrical system upgrades including three new double-ended motor control centers for improved reliability and redundancy and upgrades to the existing fire alarm system and emergency lighting system.
- Upgrades to the SCADA computer control system including new programmable logic controllers (PLCs) at each sludge pumping station and operator work stations in the Control Building so operators can monitor process operations and begin to develop a data base on plant flows, loads and performance.
- A new influent sampler upstream of any side streams and chemical addition to give plant operators a true indication of influent wastewater characteristics.
- Replacement of the scum troughs in the chlorine contact tanks, which will further lower oil and grease concentrations in plant effluent.

In addition to the Phase I upgrades, in November 2009 the City contracted Veolia Environmental Services to operate and maintain the WPCF. Under this contract, the City tripled the repair and maintenance budgets, engaged Veolia technical specialists to review and optimize process operations of the facility and undertook significant improvements to immediately improve operations and effluent quality at the plant. Among other things, Veolia has modified the sodium hypochlorite feed pump suction and discharge piping to ensure reliability during low flows at night, and has made repairs to the effluent flume ultrasonic level indicator and transmitter that have restored the ability to pace sodium hypochlorite and bisulfite based on flow, improving treatment of bacteria. These improvements and more focused attention to the operations of the plant have resulted in substantial improvement in effluent quality as shown in the data presented below.

The Phase II design was completed and submitted to DEP for review in December 2010; it is anticipated to be bid in March-April 2011 with a construction notice to proceed in August 2011. Completion of Phase II construction is scheduled for August 1, 2013, at an expected cost of \$13.5 million. Phase II improvements include:

- A new headworks building, which will include two mechanical bar screens with ½-in bar spacing each rated for peak wet weather flow, a screenings wash press for each screen, vortex grit removal with grit pumps and a grit washer and preliminary treatment (screening and grit removal) of all septage, a new polymer feed system to enhance primary treatment, and a new double-ended motor control center to replace two existing single-ended motor control centers for improved reliability and redundancy.
- New standby power generator for the entire plant.
- New transformer and switchgear for the entire plant.
- New odor control facilities for the control building and the new headworks building.
- Yard piping modifications to allow one primary sludge pump to feed one gravity thickener. A new flow meter on the pump discharge will allow the operators to monitor the flow and load to the gravity thickener.
- Additional SCADA system enhancements with connections to new equipment.
- Replacement of an existing primary sludge plunger pump.

These changes will further enhance the WPCF's performance and will result in significantly improved process redundancy.

II.C. Collection System Improvements

Like many older cities, Gloucester's sewer system includes some combined sewers, designed to transport stormwater along with sanitary sewage. This results in high flows in the collection system during wet weather and can result in combined sewer overflows (CSOs). Gloucester has been working on correcting this problem by replacing combined sewer pipes with separate sewer and stormwater pipes. The first area addressed was the basin draining roughly 87% of the area served by combined sewers. Most of the separation of this basin was completed in March of 2009, with the remainder completed in July 2010. Of the total stormwater flow to the sewers within the project area, approximately 90% has been eliminated, resulting in an estimated reduction of 95 million gallons of flow per year to the WPCF. The impacts of this project at the treatment plant have been noticeable and significant. Recovery from peak flows occurs very quickly, and there have been no flooding incidents in spite of extreme rain events, making operation of the plant easier, increasing reliability and effluent quality. Completion of the remaining sewer separation work is expected within the next four years. The CSO project costs total approximately \$35 million.

II.D. "Current" vs. "Improved" Discharge

EPA's 301(h) regulations allow applicants to meet waiver requirements based on either a "current discharge" or an "improved discharge," which are defined as follows (40 CFR §

125.58(h)-(i):

Current discharge means the volume, composition, and location of an applicant's discharge at the time of permit application.

Improved discharge means the volume, composition, and location of an applicant's discharge following:

- (1) Construction of planned outfall improvements, including, without limitation, outfall relocation, outfall repair, or diffuser modification; or
- (2) Construction of planned treatment system improvements to treatment levels or discharge characteristics; or
- (3) Implementation of a planned program to improve operation and maintenance of an existing treatment system or to eliminate or control the introduction of pollutants into the applicant's treatment works.

These definitions reflect EPA's determination that it was Congress's intent that applicants that could not demonstrate compliance with the waiver requirements using empirical data from their current discharge could still obtain waivers based on "thoroughly planned and studied" future improvements.⁵

As EPA's tentative decision notes, the City's 2006 application stated that it was "based on an improved discharge because of the completion of the 'construction of planned treatment system improvements to treatment levels or discharge characteristics,'" including "the addition of a dechlorination and odor control system in the spring of 2006." This statement reflected a misunderstanding of the regulatory term "improved discharge," because the statement describes the improvements as completed, and the remainder of the application demonstrates that the discharge at the time of application complied with 301(h) requirements. Although it was correct to note that many improvements to the WPCF had been made since the previous waiver renewal, the application should have stated that it was based on a "current discharge."

The City's discharge at the time it submitted its application and its current discharge meet the 301(h) requirements. Since 2006, the City has continued to collect data on both the effluent and the environment in the vicinity of the discharge and has submitted those data to EPA. The City can demonstrate compliance with the 301(h) requirements based on this empirical data, and does not need to rely on predicted future improvements in discharge quality. Thus, the City believes that EPA should consider the WPCF discharge at the time of submission of these comments to be its "current discharge." Moreover, even if EPA considers the City's request for a waiver to be based on an "improved" discharge as compared to when the waiver application was submitted in 2006, the City's empirical data on the composition of the discharge meets the regulatory requirements for proof that an "improved" discharge will meet 301(h) requirements. See 40 CFR § 125.62(e). In any case, EPA should not deny the 301(h) waiver for the WPCF on the basis of a semantic distinction that bears no relation to water quality in the vicinity of the outfall.

⁵ Environmental Protection Agency, Modification of Secondary Treatment Requirements for Discharges into Marine Waters: Final Rule, 44 Fed. Reg. 34784, 34788-90 (June 15, 1979).

II.E. Receiving Waters

The WPCF discharges to Massachusetts Bay, which is classified in the Massachusetts Water Quality Standards ("MWQS," 314 CMR 4.00) as a Class SA water. Gloucester has conducted extensive monitoring in the vicinity of the outfall since 1990.

In anticipation of the completion of the pipeline extension, in 1990 sampling was initiated at sites outside the harbor to establish a baseline for the monitoring of the effluent from the new diffuser (Figures 1 and 4). In October 1990, the discharge was transferred from the old single point discharge inside the harbor to the new outfall beyond the breakwater. Monitoring at the stations located around the new diffuser has been conducted continuously since March of 1990.

Major changes to the monitoring program over the years (all approved by EPA) have been:

- Priority pollutant scans of water samples were discontinued in 1990 because of the lack of detections of these compounds in samples, even at Station 1 next to the old outfall inside the harbor with no diffuser (e.g. Table 1). The new outfall with a diffuser that has an almost instantaneous dilution of 59:1 (based on conservative modeling) made it even more unlikely these compounds could be ever be detected. There have been very few detects in priority pollutants at the treatment plant and these have been at very low levels.
- Sampling for oil and grease ended in the year 2001 because most of the results were non-detects (Tables 2 and 3) and there was no evidence of accumulation in the sediments. The very few isolated detects were more probably associated with the heavy commercial and recreational boat traffic through the area.
- TSS sampling was discontinued in 2001 because 10 years worth of data had shown there was no association between concentrations in the water column and distance from the outfall. There was also no increase in solids in the sediments near the diffuser.

III. APPLICATION OF 301(h) CRITERIA

Section 301(h) of the Clean Water Act requires an applicant for a waiver to demonstrate that it meets nine statutory criteria. EPA acknowledges that Gloucester has met all but two of the criteria, but concludes in its 2010 tentative decision that Gloucester has failed to demonstrate that the WPCF discharge:

- will meet water quality standards for toxicity; oil, grease, and petrochemicals; and bacteria as required by 33 V.S.C. § 1311(h)(1); and
- will not interfere with the protection and propagation of a balanced indigenous population of fish, shellfish; and wildlife, and will not negatively impact recreational activities as required by 33 V.S.C. § 1311(h)(2).

EPA's application of these criteria to the WPCF in 2010 is strikingly inconsistent with its application of the same criteria in 2001, in ways not justified by updated data or changed water quality standards.

As is demonstrated in the detailed comments below, the discharge from the WPCF meets all water quality standards and will not interfere with the balanced indigenous population or recreation in the vicinity of the outfall. EPA's decision to tentatively deny the 301(h) waiver for the WPCF therefore has no basis in fact or law, and EPA should grant Gloucester a renewal of its 301(h) waiver and issue a new primary treatment permit for the WPCF.

IV. THE WPCF DISCHARGE MEETS THE RELEVANT WATER QUALITY STANDARDS IN THE WATERS OUTSIDE THE ZONE OF INITIAL DILUTION AS REQUIRED BY SECTION 301(h)

Section 301(h) requires that the discharge from a WPCF comply with all applicable state water quality standards at and beyond the boundary of the zone of initial dilution (ZID). As discussed below, contrary to EPA's tentative decision, the discharge from the WPCF complies with all water quality standards at the ZID boundary, and the 301(h) waiver should be granted.

IV.A. EPA Appropriately Defined the ZID

IV.A.1. Definition of the Zone of Initial Dilution

Congress added Section 301(h) to the Clean Water Act to address discharges into marine waters subject to rapid initial mixing. Therefore, under the 301(h) regulations, the effects of an applicant's discharge on the receiving waters are generally assessed at and beyond the boundary of a "zone of initial dilution (ZID)."⁶ The 301(h) regulations define "zone of initial dilution" as "the region of initial mixing surrounding or adjacent to the end of the outfall pipe or diffuser ports, provided that the ZID may not be larger than allowed by mixing zone restrictions in applicable water quality standards." 40 CFR § 125.58(dd).

EPA guidance for calculation of the dimensions of the ZID is provided in EPA's 1994 *Amended 301(h) Technical Support Document* (EPA842-B-94-007). The *Technical Support Document* specifies the ZID to be that area circumscribed by a distance d (equal to the water depth) from any point on the diffuser.

The Massachusetts Water Quality Standards (MWQS) allow for mixing zones. 314 CMR 4.03(2). EPA's tentative decision concludes that, "as a general matter, the MSWQS do not create a more strict limitation on the size of the ZID than that contained in the 301(h) regulations themselves" (p. 9).

IV.A.2. EPA Has Applied a Conservatively Small ZID for the Gloucester WPCF Discharge

The existing outfall diffuser is a linear multiport diffuser 61 m in length, with ten six-inch (0.1524 m) diameter ports spaced at 6.1 m intervals.⁷ EPA's tentative decision calculates the

⁶ The only requirement within the zone of initial dilution for ocean discharges is that conditions "must not contribute to extreme adverse biological impacts, including, but not limited to, the destruction of distinctive habitats of limited distribution, the presence of disease epicenter, or the stimulation of phytoplankton blooms which have adverse effects beyond the zone of initial dilution." 40 CFR § 125.62(c)(3).

⁷ The EPA tentative decision document and other references to the diffuser state a port diameter of 1.52 meters, which is obviously

surrounding ZID to be approximately 55.1 m by 115.2 m.

The ports discharge at a depth of 90 feet (27.43 meters) perpendicular to the diffuser barrel (which is generally perpendicular to the local bathymetric contours and principal current direction) at an upward angle of 11.25° from the horizontal. The design flow per port (for the maximum design flow of 15 MGD) is 0.0657 m³/sec, giving a port velocity of 11.8 ft/sec. At the modeled wet weather maximum flow of 10 MGD (see below), the port flow is 0.0438 m³/sec and the port velocity is 7.9 ft/sec. The diffuser design provides rapid initial dilution. The location of the discharge is well flushed by ambient currents and does not result in a build up of effluent in the vicinity of the discharge, as demonstrated by receiving water monitoring.

Critical initial dilution ("CID") as described in the EPA tentative decision is stated as 65:1 for dry weather (6.3 MGD effluent flow) and 59:1 for wet weather (10.0 MGD effluent flow). The City recently recalculated the CID using more recent data and modeling. Using the EPA-approved model UDKHDEN, the critical density profile from 2007⁸, and a critical ambient current of 3 cm/sec⁹, the initial dilution for an effluent flow of 10.0 MGD was calculated to be 79:1 as the plume rises past the eventual equilibrium depth (trapping level) and 103:1 at the point of maximum rise. The simulation was done using an effluent temperature of 15°C.¹⁰ If this simulation is done at an ambient current speed of zero the results are consistent with the existing CID. Thus, it appears that the existing CID is conservative, since the ambient current speed will almost always be greater than zero.

IV.B. The Discharge Can and Will Comply with Water Quality Standards for Toxicity

Although explicitly acknowledging that the WPCF's effluent would meet numeric state water quality standards for toxicity at the edge of the ZID, EPA nonetheless denies the 301(h) waiver on the basis of the results of effluent toxicity testing. It is arbitrary and capricious and without legal foundation for EPA to equate these test results with a failure to meet 301(h) criteria.

The Massachusetts water quality standard for toxicity for all waters includes a general narrative standard as well as numeric standards for most pollutants:

All surface waters shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife. For pollutants not otherwise listed in 314 CMR 4.00, the *National Recommended Water Quality Criteria: 2002, EPA 822-R-02-047, November 2002* published by EPA pursuant to Section 304(a) of the Federal Water Pollution Control Act, are the allowable receiving water concentrations for the affected waters, unless the Department either establishes a site specific criterion or determines that naturally occurring background concentrations are higher. 314 CMR 4.05(5)(e).

a typographical error.

⁸ This critical density profile is that profile resulting in the lowest initial dilution, with all other parameters constant (and at critical conditions). The July 11, 2007 density profile at Station 3C appears to be a good representation of critical conditions with a strong density gradient throughout the profile.

⁹ For tidally influenced marine waters, currents are constantly and rapidly varying in space and time and seldom, if ever, are zero. The typical practice is to use the 10th percentile current speed in the vicinity of the discharge as the critical condition. A value of 3 cm/sec is reasonable, and is consistent with current data collected in the vicinity of the discharge.

¹⁰ Effluent temperature has a minor effect on initial dilution: effluent temperature variation between 5°C and 25°C changes dilution by < 5%.

The MWQS standards allow water quality criteria to be exceeded inside of mixing zones "...so long as there is safe and adequate passage for swimming and drifting organisms with no deleterious effects on their populations." 314 CMR 4.03(2).

EPA acknowledges that the WPCF meets all of the numeric water quality standards for toxicity in its tentative decision (p. 23). However, EPA concludes that the WPCF discharge does not meet the narrative MWQS for toxicity. This is incorrect. EPA's tentative waiver denial states that "an end-of-pipe WET limit of 1 TU [i.e., $LC_{50} \geq 100\%$ effluent] is required by the [MassDEP] Toxics Policy" (p. 15). EPA then states (TD at 16-17):

The WPCF's effluent has frequently exceeded the existing permit's state water quality standards-based effluent limit for preventing acutely toxic effects. Based on this information, and in the absence of any data or analysis indicating that this pattern of exceedances would change if the WPCF's waiver were renewed, EPA Region 1 concludes that the applicant has failed to show that, at the time the renewed modification would become effective, its discharge would meet the state standards for toxicity at and beyond the ZID.

EPA is wrongly conflating end-of-pipe limits with ambient water quality standards. The "Toxics Policy" EPA cites is a document entitled "Massachusetts Water Quality Standards: Implementation Policy for the Control of Toxic Pollutants in Surface Waters, February 23, 1990" ("Toxics Policy").¹¹ EPA erroneously relies on the Toxics Policy for the premise that an end-of-pipe limit of 1.0 acute toxic units (TUa) employing Whole Effluent Toxicity Testing is a "water quality standard" that the WPCF must meet. Effluent limits are not water quality standards. Rather, "applicable water quality standards" for toxic pollutants for the 301(h) evaluation are those contained in 314 CMR 4.05(e), as referenced above.¹²

Moreover, EPA's reliance on WET testing to conclude that the effluent is causing toxicity at and beyond the ZID is flawed. In fact, the WPCF discharge meets the narrative and numeric water quality standards for toxicity at and beyond the zone of initial dilution, as required by the 301(h) regulations. First, the fact that all numeric effluent standards are met at the boundary of the ZID provides strong evidence that the narrative standard ("free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife") is also met. Second, the WET testing results upon which EPA relies reflect unrealistic laboratory conditions not representative of the conditions at the boundary of the ZID.¹³

¹¹ The tentative waiver decision states that the Toxics Policy provides information required by EPA under 40 CFR § 131.11(a)(2). (Tentative waiver decision at 14.) However, that regulation requires states to provide information on applying narrative standards to "point source discharges of toxic pollutants on water quality limited segments." Massachusetts Bay is not "water quality limited" for any pollutants, including toxic pollutants.

¹² Similarly, the supposed "technology-based limit" of 2.0 TU cited by EPA as MassDEP policy is an effluent limit, not a water quality standard. Moreover, neither EPA nor MassDEP provides any justification for this arbitrary number.

¹³ A number of WET test conditions differ from ambient conditions in the vicinity of the WPCF outfall in ways that increase toxicity to test organisms, making the test inappropriate for use in evaluating Gloucester's 301(h) application. Some of the differences include:

Dilution and Exposure Time

The toxicity tests bear no resemblance to what any organism is subjected to at the diffuser. In the laboratory, the exposure time is 48 hours. Because of the diffusers, the highest concentration an individual organism could experience at the edge of the ZID is a 1:59 dilution of the effluent, and that would only be for a matter of seconds. Further dilution occurs rapidly.

Finally, the City's discharge also meets the MWQS mixing zone provision inside the ZID,¹⁴ providing "safe and adequate passage for swimming and drifting organisms with no deleterious effects on their populations." To assess compliance with these narrative criteria, the MassDEP Toxics Policy document recommends 0.3 TUa as "a conservative (non-time-dependent) acute limit," "[i]n the absence of detailed site-specific exposure histories for all important species." However, this generic guidance is not part of the duly promulgated MWQS regulations and is not appropriate for the Gloucester WPCF discharge, for which there is site-specific evidence that the narrative MWQS standard is met. In the open ocean area receiving the discharge, there is clearly no blockage of passage, and the mixing resulting from the diffuser jet velocity results in rapid dilution. Based on the initial dilution modeling described earlier, the conservative CID of 59:1 is reached within 8 meters of the discharge point and within 20 seconds of the initial time of discharge. Organisms entrained in the plume would, therefore, not be exposed to purported acute toxicity levels for more than a few seconds. More than 20 years of ecological monitoring data support the assessment that there have been no deleterious effects on marine populations (see Gloucester's annual 301(h) reports submitted to EPA). The WPCF's discharge does not violate the MWQS for toxicity.

IV.C. The Discharge Can and Will Comply with Water Quality Standards for Oil and Grease

The MWQS state that Class SA waters "...shall be free from oil and grease and petrochemicals." 314 CMR § 4.05(4)(a)(7). EPA has inexplicably turned this narrative standard into a requirement that absolutely no oil, grease or petrochemicals be discharged in the WPCF's effluent, which it knows is impossible in a WPCF with *any* level of treatment, and which does not take into account the application of a ZID as allowed by Section 301(h).

In Gloucester's 2001 permit, EPA used this same narrative standard to develop an effluent limit of 25 mg/l monthly average for oil and grease (O&G) based on the discharge's dilution factor. EPA's 2010 tentative decision, without justification, states that the current permit limitation was

Dissolved Oxygen

Unrealistically low levels of dissolved oxygen in test chambers can stress test organisms. In the laboratory tests, oxygenation of the test chambers is not permitted unless DO drops to 4 mg/l and then oxygenation is only allowed at the rate of 100 bubbles/min. In the results for tests done on the Gloucester effluent since 2001, there was a statistically significant correlation ($p < 0.001$) between the average oxygen concentration at 24 hrs in the test chambers and survival rates of both *Menidia* and *Mysidopsis*. In reality, the effluent of the Gloucester wastewater treatment plant is released into an oxygen-rich environment. Regular testing of dissolved oxygen levels at the outfall over the last 20 years show that there is never an issue with concentrations of dissolved oxygen (see, e.g., Table 4). Phytoplankton in the ocean produce at least half of all the oxygen on the planet (e.g. Field et al., 1998) and the photic zone in Massachusetts Bay is very productive.

Temperature

The laboratory tests are conducted at either 20 or 25 degrees Celsius although the temperature at the outfall never approaches these temperatures. The diffuser releases the effluent at 30 meters depth in Massachusetts Bay where the maximum summer temperature is 10 - 11 degrees C. For most of the year the temperature is well below 10° C. A toxicity identification evaluation (TIE) study conducted on the Gloucester treatment plant effluent identified ammonia as the likely primary cause of toxicity (Brown and Caldwell, 2007). The percentage of unionized ammonia, the fraction toxic to marine organisms, is greatly affected by pH and temperature. Higher temperature and pH increases the amount of un-ionized ammonia. At a pH of 8 and salinity of 32 ppt (approximate conditions at the outfall), the percentage of un-ionized ammonia changes from 1.44% at 10°C degrees to 2.98% at 20° C and 4.28% at 25° C (EIFAC, 1986). Clearly, the temperature of the seawater during the laboratory tests has a dramatic effect on results, essentially doubling or tripling the toxicity of the ammonia component.

¹⁴ Gloucester does not concede that the 301(h) criteria contemplate the application of water quality standards inside the ZID, or that the Toxics Policy's contemplation of an acute toxicity limit inside a mixing zone is a water quality standard for Section 301(h) purposes, particularly since these requirements are inconsistent with 40 CFR § 125.62(c)(3), which provides requirements for within the ZID. There is no dispute that the discharge meets those requirements.

“inappropriate.” In the tentative decision, EPA states that the renewal permit limitation should be 0 mg/l, with a compliance limit of 5 mg/l because that is the lowest reliably measurable concentration. O&G has been detected above 5 mg/l in the plant’s discharge, and therefore EPA concludes that Gloucester has failed to show that its discharge would meet water quality standards for O&G at and beyond the ZID.

EPA’s translation of the “free from” water quality standard for oil and grease into a 5 mg/l standard for the WPCF effluent lacks a rational basis. Based on the critical initial dilution of 59:1 posited by EPA, even an effluent concentration of 25 mg/l will result in an ambient concentration of 0.42 mg/l at the edge of the ZID. This is an order of magnitude below the ML of 5 mg/l, which EPA indicates is an appropriate compliance level. Thus, the effluent limitation of 25 mg/l previously implemented by EPA was appropriate and even conservative based on the initial dilution. Because the current discharge consistently meets this limitation, there is no basis to conclude that the effluent will result in any violations of the criterion at the edge of the ZID.

Further, compliance with the MWQS criterion in the receiving waters has been well demonstrated. For the first 12 years of Gloucester’s 301(h) monitoring program, levels of oil and grease were measured in the receiving waters. Samples were taken from surface and bottom waters at four stations around the diffuser and at two control sites. In spite of commercial and recreational boat traffic through the area, positive detects were exceedingly rare.¹⁵ As a result, EPA has not required sampling for oil and grease in the waters around the outfall since 2002.

Moreover, the City is unaware of any permits for Massachusetts POTWs discharging to SA waters for which the O&G limit is set at the level EPA says is required. Below are some examples from the EPA Region 1 website of permits for POTWs discharging to SA waters. None of these even have an O&G limit, much less a 0 mg/l requirement.

- Cohasset Wastewater Treatment Plant (NPDES Permit MA0100285, 7/18/2007): No O&G limit or monitoring requirement.
- Rockport Wastewater Treatment Plant (Draft NPDES Permit MA0100145, public notice date 5/20/2009): No O&G limit or monitoring requirement.
- South Essex Wastewater Treatment Facility (NPDES Permit MA0100501):
 - Permit dated 2/9/2001: O&G monitoring/reporting requirement only.
 - Draft permit (2008): No O&G limit or monitoring requirement. The fact sheet states:

The current permit includes an effluent limit of 15 mg/l for oil and grease. This value meets the narrative “free from oil and grease and petrochemicals” in the SA criteria. Since the current permit became effective on October 10, 2001, the maximum daily value for oil and grease has not exceeded 9 mg/l and has an average maximum daily value of 7.83 mg/l (n=70). EPA has determined that there is no reasonable potential and has removed the requirement from the permit.

- Dartmouth Water Pollution Control Facility (NPDES Permit MA0101605,

¹⁵ in 2000 and 2001 there were no detects for oil and grease in more than 500 samples (Tables 2 and 3).

6/19/2009): No O&G limit or monitoring requirement.

EPA should not arbitrarily impose an oil and grease standard which is not achievable and which has not been applied to other WPCFs discharging to marine SA waters. The existing standard has already been determined to be adequately protective, and thus Gloucester has demonstrated its discharge can and will comply with the water quality standard for oil and grease.

IV.D. The Discharge Can and Will Comply with Water Quality Standards for Total Petroleum Hydrocarbons (TPH)

Similar to the oil and grease analysis, EPA again arbitrarily translates the "free from" water quality standard into a 0 mg/l permit limit with a 5 mg/l compliance limit, regardless of data showing that the effluent does not contribute detectable TPH to the receiving waters. Using data from January 2006 to March 2009, EPA's tentative decision states that "the WPCF's discharge violated the 5 mg/l TPH limit nine times out of the last thirty-nine sampling events." (p. 17). First, EPA's determination that the WPCF's discharge violates the 5 mg/l standard ignores the fact that the limit is consistently met at the boundary of the ZID, which is what is required by Section 301(h). Moreover, EPA ignores more recent data and wrongly fails to recognize the significant improvement in the quality of the discharge since the City's application was submitted in 2006. The WPCF effluent only exceeded the 5 mg/l TPH limit *once* between April 2007 and December 2010 (see TD, p. 18, and WPCF 2009-2010 monthly Discharge Monitoring Reports submitted to EPA). Not coincidentally, the City began to implement a program to separate its combined sewer system soon after the application was submitted. The majority of TPH in the discharge was almost certainly a result of stormwater run-off from streets and parking lots. The Phase I CSO Abatement Project was completed in March 2009. There have been no violations of the TPH limit since then.

The fact that the WPCF effluent is not a significant contributor to TPH in the receiving waters has also been demonstrated in the results of sediment sampling in the vicinity of the outfall reported annually since 1991. Priority pollutants scans for volatile and semi-volatile organics were originally performed on samples from both the water column and sediments. Water column sampling was discontinued in 1991 due to the failure to detect any of these compounds. Sediment sampling has continued for the last 20 years at sites ranging from 30 m to 1500 m from the diffuser. Only a few pyrogenic semi-volatile hydrocarbons have been detected and these at very low levels (parts per billion) typical of background levels for Massachusetts Bay (Table 5). The sampling site nearest the outfall usually has the lowest concentrations of these compounds. There have been no indications of increases in the concentrations of any of these materials in the 20-year time period. The sources are most likely atmospheric deposition, runoff and boat traffic. There is simply no basis to conclude that TPH from the WPCF discharge is having any impact on the marine environment in the vicinity of the outfall.

IV.E. The Discharge Can and Will Comply With Bacteria Water Quality Standards for Primary Contact Recreation

Once again ignoring the provisions of Section 301(h) that mandate the determination of compliance at the ZID boundary, EPA concludes that the discharge from the WPCF will violate primary contact bacteria water quality standards. Compounding the error, EPA faults Gloucester

for not providing data to support compliance with enterococci standards that it acknowledges did not even exist at the time the City's application was submitted.

As an initial matter, the existing Gloucester WPCF is designed to meet and has demonstrated it can consistently meet the applicable fecal coliform effluent limits in the permit. The permit limit exceedances indicated in Table 5 of the tentative denial were all the result of operational issues that have since been corrected or of one-time events unlikely to be repeated. Most of the exceedances of the fecal coliform limit occurred in 2006-2007, during the commissioning of the dechlorination system. The dechlorination system was designed for the dosage to be controlled automatically, flow-paced and altered by a feed back loop from a residual analyzer, but the automatic system was not reliable. Eventually, after numerous attempts and system modifications, the system was set up to run with manual dosage adjustments and exceedances of the fecal coliform limit stopped. The handful of bacteria violations since then have been the result of one-time mechanical problems or operator error, as shown in the table below.

Exceedances of Daily Maximum Permit Limit for Fecal Coliform Bacteria in Effluent Gloucester WPCF 2009-2010		
MONTH	NUMBER OF EXCEEDANCES	REASON FOR EXCEEDANCES
September 2009	1	The failure of hypochlorite pump to deliver adequate chemicals (due to wear) caused inadequate disinfection.
December 2009	2	Both violations appear directly related to mechanical problems caused by sludge accumulations in the clarifiers. Primary sludge piping was blocked by grit preventing sludge removal, causing the clarifier rake arms to torque out and solids washouts. During the preceding 6 or 7 months, it had been impossible to remove grit at the headworks because of the placement of temporary emergency bypass pumps (required by Mass DEP) while one of the influent screw pumps was being replaced due to failure.
April 2010	1	Inadequate chlorination due to operator setting dosage too low, in error.
September 2010	1	Chlorine mixers tripped out during a generator load test. Operators failed to notice and the mixers were not restarted for some 90 minutes, during which time a sample had been collected for bacteria analysis.

In any case, the permit limit exceedances in Table 5 of the TD do not translate into violation of state water quality standards in the receiving waters at the boundary of the ZID. Employing the dilution factors used by EPA, there would be no exceedances of the monthly geo-mean and only six exceedances of the daily maximum concentration of bacteria over the three years of results in Table 5 of the TD, all but one of which occurred during the commissioning of the dechlorination system in 2006-2007. EPA seeks to avoid Section 301(h)'s recognition of the use of a ZID by stating that EPA and Massachusetts traditionally do not allow dischargers to meet bacteria criteria through dilution. However, the TD cites to no Massachusetts regulations or guidance on this point, and the EPA document it cites is a 2008 memorandum that references mixing zones in

"rivers and streams," where presumably access to waters immediately adjacent to an outfall could be more common. The Gloucester discharge is clearly not to a river or stream, so the referenced policy is inapplicable. Finally, EPA bases its conclusion that the discharge does not meet the bacteria water quality standard for primary contact recreation on the "fact" that there are popular scuba diving locations in the vicinity of the outfall. However, EPA itself recognized in its 2001 decision that the area in the vicinity of the discharge has never been identified as a popular scuba diving location, and that the discharge is not impacting recreational activities. There has been no change in recreational uses in the vicinity of the discharge, and EPA's 2001 conclusions remain valid.

Also, with regard to EPA's criticism that Gloucester did not submit any data regarding enterococci levels in the WPCF's discharge, the City's application for permit renewal was submitted on May 26, 2006. The MWQS fecal coliform standard for primary contact recreation was not changed to the enterococci criterion until December 2006. The City had no requirement to sample for enterococci or meet the enterococci criterion prior to the submittal of its application, nor has the WPCF NPDES permit been modified to require enterococci monitoring. Therefore, inclusion of discharge-specific enterococci information in the application was not only impossible but unnecessary at the time of the submittal.

In the absence of actual data, EPA's opinion that the Gloucester WPCF will not meet the enterococci requirements is conjecture, and not based on facility-specific information or analyses of the Gloucester WPCF or its influent or discharge characteristics. Instead, EPA simply recites the existing bacteria data and states that "This result [*based on studies from Southern California*] tends to suggest that the new single sample standard for enterococci in the MSWQS for SA waters is likely to be even more difficult to meet than the old fecal coliform standard" (emphases added). Conjecture and guess-work are not sufficient grounds to deny the 301(h) waiver.¹⁶

IV.F. The Discharge Can and Will Comply With Bacteria Criteria for Shellfishing

On the basis of inapplicable water quality standards, EPA concludes that the discharge will not comply with bacteria criteria for shellfishing. This is not correct.

The TD states that the numeric criterion for bacteria for Class SA waters designated for shellfishing applies to the area to which the WPCF discharges. For such waters, the MWQS state that "fecal coliform shall not exceed a geometric mean Most Probable Number (MPN) of 14 organisms per 100 ml, nor shall more than 10% of the same exceed a MPN of 28 per 100 ml..." EPA states that, according to Gloucester's annual 301(h) monitoring reports, "23 out of 192 samples (approximately 12%) taken at Station 3A, which is located at the edge of the ZID, exceeded 28 organisms per 100 ml." (p. 22) (EPA does not state which years' reports it used to make this calculation.)

EPA's conclusion is unjustifiable for a number of reasons. First, the MWQS for shellfishing do not apply to the area of the WPCF discharge. EPA itself acknowledges that the area of the

¹⁶ Although the City believes that it will meet the new enterococci standard, at a minimum it would be appropriate for EPA to condition the waiver on the implementation by the City of a compliance plan that would include operational and monitoring activities that would be undertaken over the next permit cycle to demonstrate that the WPCF can meet the enterococci criterion.

WPCF discharge is classified as "Prohibited" by the Massachusetts Division of Marine Fisheries (DMF) under the National Shellfish Sanitation Program (Figure 5).¹⁷ The MWQS for Class SA waters designated for shellfishing only apply to "Approved and Conditionally Approved Shellfish Areas." 314 CMR 4.05(4)(a). Thus, an area that is classified not as "Approved" or "Conditionally Approved" by the DMF, but rather as "Prohibited," is not subject to the MWQS for shellfishing.

Further, even if the shellfishing bacteria standard did apply in the vicinity of the outfall, EPA has again ignored the time trends in the data. Results for 2009 monitoring (Table 6) show that at each station in the vicinity of the outfall (including at the boundary of the ZID; see Figure 1), the geometric mean of all samples did not exceed 14/100 ml, nor did more than 10% of samples exceed 28/100 ml.

Finally, even if the area were opened to shellfishing (which, as discussed above, will not be the case as long as *any* WPCF discharge, primary or secondary, is present), there is no potential for shellfishing in the area of the outfall. There are only two species found in the area of the discharge that could be considered potential resource species. These are the soft-shell clam, *Mya arenaria*, and the ocean quahog, *Arctica islandica*. Both of these species are typically found in "beds" where high densities make it feasible to collect enough individuals to make the effort worthwhile. *Mya arenaria* beds are found in intertidal areas and ocean quahog beds in sandier sediments offshore. Small numbers of juveniles of both these species have been reported in benthic grab samples in the monitoring program, but fewer than 10 adult individuals of *Arctica islandica* and no adult specimens of *Mya arenaria* were collected in more than 1000 benthic grab samples taken over 20 years. Further, there is not presently a commercial or recreational market for *Arctica islandica* in Massachusetts.¹⁸

As demonstrated above, the discharge from the WPCF meets all water quality criteria, and therefore the 301(h) waiver should be granted.

V. THE DISCHARGE WILL ALLOW MAINTENANCE OF A BALANCED INDIGENOUS POPULATION OF SHELLFISH, FISH AND WILDLIFE AS WELL AS RECREATIONAL ACTIVITIES IN AND ON THE WATER

Despite acknowledging that actual biological monitoring in the vicinity of the outfall has revealed no adverse impacts on shellfish, fish and wildlife, EPA improperly relies on end-of-the-pipe WET test results to conclude that the 301(h) waiver should be denied. Also, with regard to recreational impacts, EPA relies on the same incorrect bacteria impact analysis discredited in Section IV, above. These conclusions are arbitrary and capricious and incorrect as a matter of law.

¹⁷ The outfall is considered a point source under the National Shellfish Sanitation Program, regardless of whether pollution from the point source is actual or potential and whether the POTW uses secondary treatment, and as such there must be a prohibited buffer around that outfall for the harvesting of shellfish. Thus, denying the 301(h) waiver and imposing a secondary treatment requirement is not going to result in the area of the discharge being opened to shellfishing.

¹⁸ Based on discussions with the Gloucester Shellfish Constable.

V.A. EPA Incorrectly Ignores Biological Data Demonstrating a Balanced Indigenous Population and Instead Relies on Unreliable WET Testing

Pursuant to 301(h), Gloucester's discharge "must allow for the attainment or maintenance of water quality which assures protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife" beyond the ZID boundary. 40 CFR 125.62(c)(1-2). EPA's *Amended Section 301(h) Technical Support Document* prescribes the use of a biological assessment (not laboratory toxicity testing) to address this criterion (see pp. 78-92). Despite its own conclusion that biological monitoring data show no adverse effects from the Gloucester WPCF outfall, EPA relies solely on laboratory toxicity testing to conclude that "the applicant has failed to demonstrate that a modified discharge would not interfere with the attainment or maintenance of that water quality which assures protection and propagation of a balanced indigenous population." This conclusion does not comport with the approach laid out in the *Amended 301(h) Technical Support Document*.¹⁹

V.A.1. Biological Monitoring Demonstrates the Presence of a Balanced Indigenous Population

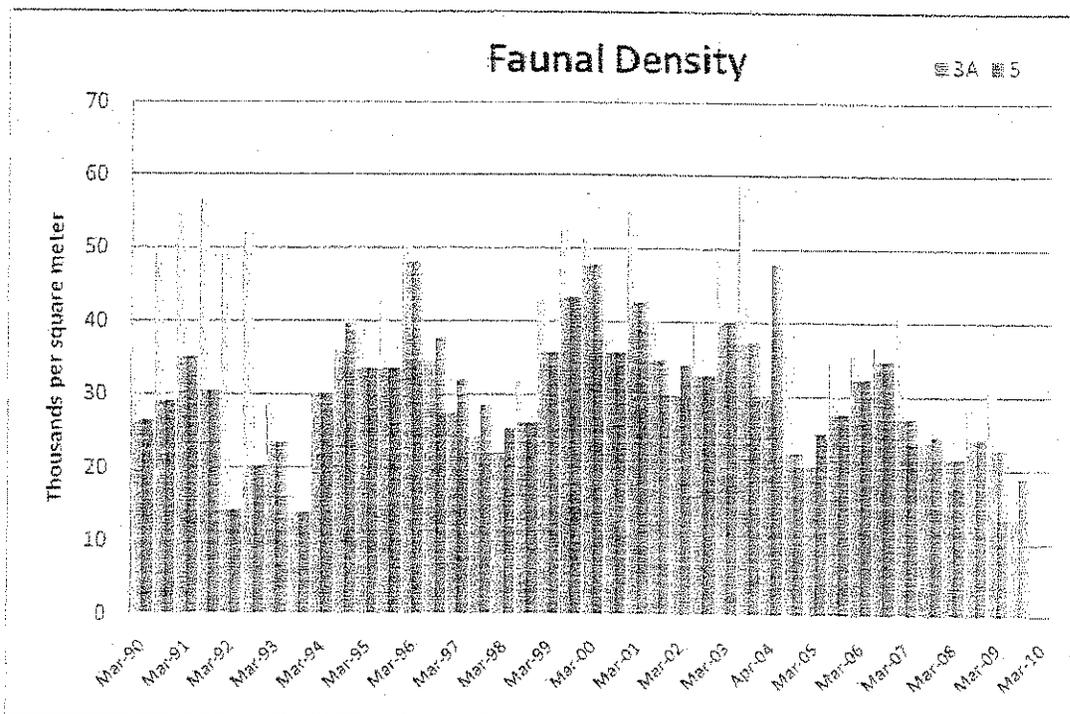
The City has spent in excess of \$3 million over the last 20 years conducting an extensive EPA-approved monitoring program designed in accordance with the *Amended 301(h) Technical Support Document* to identify any possible effects of the effluent on the receiving waters. The city believes that EPA has erred in ignoring this powerful data set which clearly demonstrates no impacts from the Gloucester effluent and instead, inconsistently with its own 301(h) guidance, basing its decision on a laboratory test which produces highly variable results of questionable relevance.

The key focus of the monitoring program is the benthic community. These small organisms living in the sediments on the sea floor do not move significant distances and are subject to any organic and contaminant loadings that reach the sediments. There is a very well established base of ecological theory developed over the last 40 years and supported by thousands of peer-reviewed scientific papers that identifies benthic community changes induced by organic loading or contaminant stress. See, e.g., Pearson and Rosenberg (1978); Rhoads and Germano (1982). Pearson and Rosenberg described the differences in community structure (number of species, faunal densities, and species composition) along a gradient from a highly contaminated point source to an uncontaminated area. Changes in the benthic fauna caused by organic loading and contaminants range from very subtle differences in species composition to major reduction in species richness and densities (Figure 6). Gloucester's monitoring program has provided a wealth of data that the City has used to evaluate whether the outfall has led to any changes in the benthic community.

One parameter is species density. In the monitoring program, the five replicate benthic grab samples at each site collect show densities of from 20,000 to more than 50,000 organisms per square meter. Densities are highly variable and are affected by the time of sampling with respect

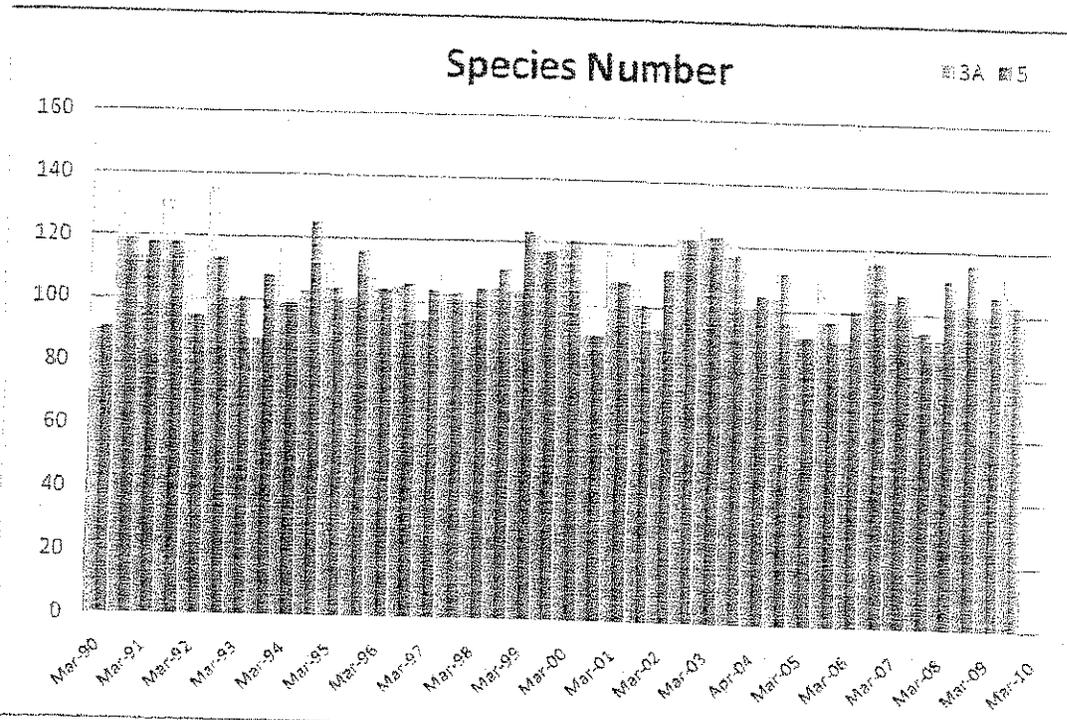
¹⁹ The waiver denial quotes a different guidance document, the *Technical Support Document for Water Quality-based Toxics Control*, for the premise that toxicity testing results can trump field-based biological monitoring. However, that guidance is not appropriate for the 301(h) evaluation because it is intended to be used for the purpose of establishing end-of-pipe water quality based effluent limits.

to breeding cycles. A recent settlement of juveniles out of the water column produces much higher densities. While the numbers vary widely, there has been no trend of decreasing density at Station 3A, 30 m from the outfall, when compared with a control site, Station 5. Annual variations in faunal density at Station 3A parallel that at Station 5, located more than 500 m distant (see figure below).



Faunal density at Station 3A, 30 m from the outfall, and control Station 5, 1990 - 2009

A more conservative index is species richness, the total number of species found in 5 replicate grabs. This has ranged from about 85 to 130 species in each sampling for the period from 1990 to 2009. There has been no trend of either an increase or decrease in species richness at either the outfall site, Station 3A or the control site, Station 5 (see figure below).



Species richness at Station 3A, 30 m from the outfall, and control Station 5, 1990 – 2009

An even more sensitive parameter is species composition. The slightest environmental stress, be it natural or due to some anthropogenic source, will cause changes in species composition which can be dramatic or very subtle. There have been no such changes in the fauna near the outfall. There has always been a very high level of similarity between the fauna at Station 3A, near the outfall and the other sampling sites (Figure 7). Multivariate classification is an analysis based on all the species present in individual samples. A similarity coefficient is calculated between all possible pairs of samples and a clustering strategy is used to group samples based on the resulting similarity indices. In a very uniform environment, Bray/Curtis similarity between replicate samples taken at the same site will be on the order of 70 – 80%. In Figure 7 it is clear that there is a very high degree of similarity between all sampling sites around the Gloucester outfall after 20 years.

Finally, an inspection of the dominant species at Stations 3A, located 30 m from the diffuser, shows that there has been no change in community structure over a very long time period. In March 1993, 18 months after discharge started at the new outfall, a small polychaete worm, *Prionospio steenstrupi*, was the most abundant organism followed by a small bivalve, *Nucula delphinodonta* (Table 7). The same two species were dominant organisms at the outfall station 16 years later. Most of the sub-dominant species were small polychaetes all of which were found in both samplings at the site. *Prionospio* has been the most common species in all samplings at stations near the outfall except in 1992 when a physical disturbance that affected the whole area allowed more opportunistic polychaetes of the genus *Polydora* to dominate the fauna for a short period of time. *Prionospio* was still present but not as the dominant species (ADM, 1994). The benthic community recovered by the end of the year and has shown

remarkable stability and persistence over the 20-year period, clearly not affected by the presence of the Gloucester outfall.

The 20 year biological monitoring program conducted by Gloucester has consistently demonstrated that the discharge from the WPCF allows for a balanced indigenous population of shellfish, fish and wildlife.

V.A.2. WET Toxicity Testing is Not an Appropriate Tool for Evaluating Impacts from the WPCF's Discharge

Consistent with the 301(h) guidance, there are many reasons that a biological assessment is most appropriate for evaluating the impacts of Gloucester's discharge and WET testing should not be used. First, a toxicity test is nothing more than a screening tool which tells little or nothing about what actually happens in the environment. The WET testing of Gloucester's effluent does not replicate ambient conditions at the outfall, for a number of reasons, as discussed in Section IV.B. Second, toxicity test results can be quite variable from laboratory to laboratory. Quality assurance testing done annually by regulatory agencies has demonstrated wide variability in results on the same toxicant among various laboratories. Similarly, in a "split-sample" test done during the TIE study on the Gloucester effluent, the effluent passed the test at one laboratory but failed at the other (Brown and Caldwell, 2007). WET testing is unreliable and should not be considered to the exclusion of the 20 years of biological monitoring data demonstrating a balanced indigenous population. Finally, EPA's regulations specify that "[a] balanced indigenous population of shellfish, fish, and wildlife must exist...*beyond the zone of initial dilution.*" 40 CFR § 125.62(c)(2) (emphasis added). Beyond the zone of initial dilution, the effluent is diluted by at least a 59:1 ratio. Thus, WET testing of 6.25% - 100% effluent (1:1 - 16:1 dilutions) provides no information on conditions at and beyond the zone of initial dilution.

V.B. Recreational Activities

In its tentative decision, EPA claims that "the WPCF is very likely currently causing violations of the single sample, primary contact water quality criterion for Class SA waters under the MSWQS," and thus "reflects a threat to the health of persons engaged in water-contact recreation in these waters" (p. 24). As discussed in Section IV.E, above, EPA's claim that the WPCF is "very likely" violating bacteria water quality criteria is unfounded. Further, it is highly unlikely that anyone is engaged in water-contact recreation in the immediate vicinity of the outfall. In its July 2001 Final Decision Document (V.C.4), EPA concluded that the location of the relocated outfall "...has never been identified as a popular scuba diving location." In fact, the closest potential area to the outfall for diving or other recreational activities is the shipwreck Chester C Poling. It is located more than a third of a mile from the outfall. For these and other reasons, EPA determined in 2001 that the "...primary discharge at the relocated outfall site is not impacting recreational activities." Recreational use of the area near the outfall has not changed since 2001, and EPA's conclusion that the discharge is not impacting recreational activities remains valid.

VI. THE DISCHARGE WILL COMPLY WITH PROVISIONS OF OTHER STATE, LOCAL AND FEDERAL LAWS

VI.A. Ocean Sanctuaries Act

The waiver denial states (pp. 28-29) that the WPCF is covered by the "grandfathering" provisions of the Massachusetts Ocean Sanctuaries Act, M.G.L. c. 132A §§ 12A-18, which would require a variance for any flow increase.

This statement is incorrect. Gloucester's WPCF is not subject to the requirements of the Massachusetts Ocean Sanctuaries Act. A Special Act of the General Court made a specific exception for the Gloucester facility (see Attachment A):

Notwithstanding the provisions of sections fourteen, fifteen, sixteen and eighteen of chapter one hundred and thirty-two A of the General Laws, the city of Gloucester may build and discharge from a primary wastewater treatment facility with an extended outfall as described in the application submitted to the administrator of the Environmental Protection Agency of the United States for a waiver of the secondary wastewater treatment requirement as provided by 33 USC 1343.

Chapter 120 of the Acts of 1981 (May 1, 1981).

The application Gloucester had submitted to the Environmental Protection Agency described a facility with design average flow of 7.24 MGD and design maximum flow of 15 MGD (see Attachment A); the facility was constructed as designed, and Gloucester is not proposing to significantly increase flow at all, much less beyond the design flow of the plant as contemplated in Chapter 120 of the Acts of 1981. Thus, the discharge from the Gloucester WPCF is exempt from the requirements of the Massachusetts Ocean Sanctuaries Act.

VI. B. Compliance with Other State and Federal Laws

The relevant state and federal agencies concurred with EPA's 2001 waiver decision, and there are no changed circumstances that would warrant disapproval of this waiver renewal now. Moreover EPA has not stated any reason to believe that renewal of Gloucester's 301(h) waiver would fail to comply with other state or federal laws, and does not appear to have even contacted any of the relevant state or federal agencies to seek their opinions.

VII. COMMENTS ON DRAFT NPDES PERMIT REQUIRING SECONDARY TREATMENT

At the same time it issued its draft denial of the 301(h) waiver, EPA also released a draft NPDES permit for the Gloucester WPCF incorporating secondary treatment requirements. As stated to EPA in a letter dated January 5, 2011, the City believes that drafting of the NPDES permit should take place after EPA has issued its final decision on the 301(h) waiver. Nonetheless, the City is preparing comments on the draft permit, which it will submit before the close of the public comment period, which has been extended until the date of the public hearing in this

matter, currently scheduled for March 24, 2010.

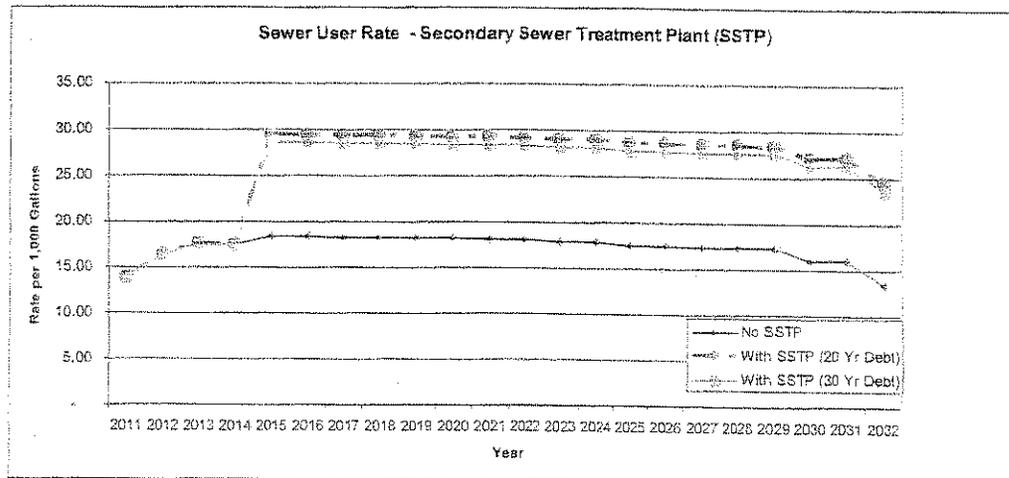
VIII. SOUND PUBLIC POLICY FAVORS THE ISSUANCE OF A 301(h) WAIVER FOR THE WPCF

VIII.A. The Financial Impacts to the City of a Secondary Treatment Plant Would Be Enormous

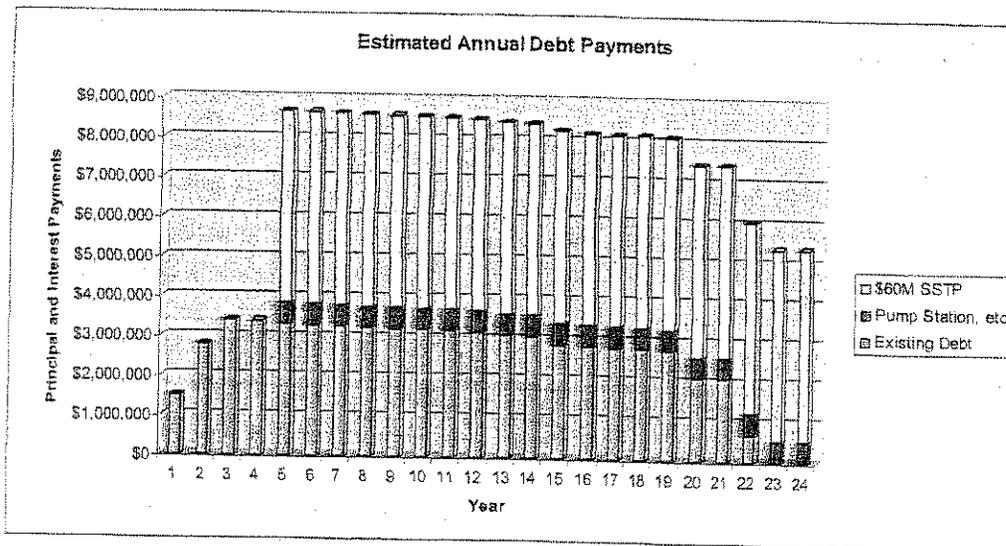
The City has completed a preliminary evaluation of the impacts of this proposed waiver denial on the financial situation of the City and affordability to ratepayers (Attachment B). The analysis is based on preliminary estimates of the capital and operating costs of a new secondary wastewater treatment plant to replace the existing advanced primary plant. Preliminary estimates indicate that a new secondary facility would cost approximately \$60,000,000, not including land and other ancillary costs. Annual operation and maintenance costs would be approximately \$1,000,000 per year above the existing operating costs.

The following would be the consequences of EPA's proposed action:

1. Without the Construction Grants program, which EPA instituted in 1972 to pay 75% of the cost of secondary treatment plant for communities that did not receive a 301(h) waiver, the full cost of the new facility would fall on the ratepayers of Gloucester. There are currently no federal grants available for secondary treatment plant construction, as there were for all of the secondary plants built between 1972 and 1990.
2. Including the increased operations and maintenance costs with capital costs, annual charges for the average Gloucester household would increase from \$1,251 per year presently to approximately \$2,570 per year (see figure below). By comparison, the average 2009 rate per household in Massachusetts was \$584 per year. The highest rate in Massachusetts in 2009 was \$1,632.²⁰



3. This annual charge would be about 5.4% of the Median Household Income in the City, *almost three times the percentage that EPA considers a "very high" burden on residential customers in its guidance on affordability of sewer infrastructure improvements.*
4. The total sewer enterprise debt of the City would more than double, which could have a significant impact on the City's bond rating (see figure below).



5. Because of the current high employment and foreclosure rates and the high number of citizens on fixed incomes, such an increase in user charges would likely result in payment defaults and decrease user charge collection percentages.
6. The large increase in rates could cause Gloucester to lose businesses to other towns or areas of the country, exacerbating the unemployment rate and increasing residential user rates (above those estimated above) as operating and debt service costs are reallocated from the commercial – industrial base to the residential base.
7. The ability of the City to operate, maintain, repair and replace aged sewerage infrastructure, as well as comply with existing commitments to CSO control in addition to new EPA regulations on stormwater, would be seriously limited. The risk and danger of the failure of critical existing equipment and systems would increase, adding additional burden to municipal budgets.

In the current and probable future economic climate, the mere perception of dramatically increased future costs of public utilities, especially water and wastewater services such as those

that would be required in this case, could be expected to have serious and immediate repercussions in the business and real estate sectors of the City. The very large increases in user rates resulting from EPA's proposed decision might be justified by clear, beneficial environmental improvements that would increase property values, quality of life, or other social or economic conditions in a community. In this case, the threat of quantum increases in the cost of wastewater service, combined with no measurable environmental improvement, only poses a long-term economic threat to the City of Gloucester, with no associated benefits. In summary, EPA's tentative decision creates a very critical and serious economic threat to the City.

VIII.B. Congress Recognized the Financial Burden of Upgrading to Secondary Treatment and Enacted Section 301(h) to Alleviate the Burden

On passage of the Clean Water Act in 1972, Congress recognized the very heavy financial burden of secondary treatment being mandated on publicly owned treatment plants. In light of this burden, Congress enacted two interrelated provisions that allowed cities to meet the enormous capital and operating requirements:

1. The 301(h) waiver provisions; and
2. The Construction Grants Program that provided 75% grants to communities for upgrade to secondary treatment.

VIII.B.1. Waiver Intent

Congressional intent in creating the § 301(h) waiver provision was to establish an alternative to costly secondary treatment for municipalities that are located near coastal waters with adequate assimilative capacity when there would be no significant impact on the marine environment.²¹ The legislative history contains numerous references to Congress' concern about the enormous costs associated with secondary treatment especially in contrast with the small marginal benefits when the outfall was in an active, deep-water marine environment.²² A key congressional report stated it clearly:

There have been continuing increases in [the cost to construct secondary treatment]. In view of these factors, and in order to achieve needed savings in the cost of treatment of municipal wastes, the Committee considers it desirable to make the operation of ocean discharges available where it can be shown that unacceptable adverse environmental effects will not result.²³

²¹ See H.R. REP. 97-270, at 17 (1981), *reprinted in*, 1981 U.S.C.C.A.N. 2629, 2645.

²² See H.R. REP. NO. 97-270, at 17 (1981), *reprinted in* 1981 U.S.C.C.A.N. 2629, 2645 ("In view of these factors, and in order to achieve needed savings in the cost of treatment of municipal wastes, the Committee considers it desirable to make the operation of ocean discharges available where it can be shown that unacceptable adverse environmental effects will not result.") (emphasis added); see 95 Cong. Rec. S19,679 (1977) (daily ed. Dec. 7, 1977); see also *Rite-Research, Etc. v. Costle*, 650 F.2d 1312, 1318 (5th Cir. 1981) ("There are a number of communities that have been and will be subjected to administrative burdens way beyond their financial and administrative capacity because of the need to comply with the secondary treatment requirement ... [T]he Congress has announced its intention to put some sense into the treatment of municipal wastes"); see S. REP. NO. 95-370, at 44 (1977), *reprinted in* 1977 U.S.C.C.A.N. 4326, 4369 ("This provision's goal is to limit unnecessary treatment for treatment's sake").

²³ See H.R. REP. NO. 97-270, at 17 (1981), *reprinted in* 1981 U.S.C.C.A.N. 2629, 2645 (emphasis added).

Federal courts have also emphasized the importance Congress placed on the avoidance of the unnecessary cost of constructing secondary treatment facilities by municipalities that can discharge to an active ocean environment. For example, the United States Court of Appeals for the District of Columbia Circuit said that § 301(h) was designed to "allow some savings in sewage treatment through harmless marine discharges."²⁴ Furthermore, the Court found "[t]he purpose of § 301(h) is to permit some coastal municipal sewage treatment plants to avoid costs associated with secondary treatment so long as environmental standards can be maintained. If a treatment plant can discharge a pollutant and meet the criteria of § 301(h), unnecessary expenditures may be avoided."²⁵

EPA rightfully granted Gloucester a 301(h) waiver in 1985, consistent with the intent of Congress and consistent with the provision that a 301(h) waiver was appropriate "where it can be shown that unacceptable adverse environmental effects will not result." As shown in this document, and in light of the total absence of any evidence from EPA to the contrary, 20 years of monitoring and testing at the site of the discharge has shown that there are no adverse environmental impacts and that EPA's decision to grant the waiver was justified and in accordance with the intent of the law.

VIII.B.2. Construction Grants Provision

Most municipal secondary wastewater plants built under the Clean Water Act received 75% grants to pay for the construction of the facilities. The \$5 billion per year authorized through the first 12 years of the Act recognized that cities could not handle the financial burden without government financial support. Where appropriate, POTWs were granted 301(h) waivers to avoid unnecessary government spending in situations with no contingent environmental benefits.

With the elimination of the Construction Grants program over 20 years ago, for EPA to reverse an appropriate 301(h) waiver decision that has stood for 25 years, including a renewal confirming that there were no impacts of the discharge, without any reasonable basis is not only unwarranted, but places Gloucester in an extremely untenable financial position. Such a decision would result in a gross waste of public moneys with no measurable environmental benefit and is a clear violation of the intent of the Clean Water Act and public policy.

VIII.C. Sustainability Principles Favor Granting the 301(h) Waiver

There is an emerging focus on the benefits of integrating principles of sustainability into environmental solutions and decisions. Sustainability can be defined as "*Meeting the needs of the present generation without compromising the ability of future generations to meet their needs.*"²⁶ The following assessment analyzes the environmental, social and economic benefits, of secondary treatment as compared to advanced primary treatment at the Gloucester WPCF.

²⁴ *Natural Resources Defense Council, Inc. v. U.S. Environmental Protection Agency*, 656 F.2d 766, 780 (D.C. Cir. 1981) (citation omitted).

²⁵ *Id.* at 784 (emphasis added).

²⁶ United Nations General Assembly (March 20, 1987). *Report of the World Commission on Environment and Development: Our Common Future*; Transmitted to the General Assembly as an Annex to document A/42/427 - Development and International Co-operation: Environment; Our Common Future, Chapter 2: Towards Sustainable Development; Paragraph 1. United Nations General Assembly. <http://www.un-documents.net/ocf-02.htm>. Retrieved 1 March 2010.

The clear conclusion of this assessment is that EPA's decision to deny the waiver would violate the principles of sustainability, burdening the citizens of Gloucester for this and at least the next generation with severe economic and social consequences that would compromise their ability to operate, maintain, repair and replace their existing water and wastewater infrastructure, as well as provide for public safety, education and other basic services with no measurable environmental improvement in water quality or beneficial water uses. On this basis, the EPA decision violates the often-stated priorities of both the Federal Government and Commonwealth of Massachusetts that environmental decisions should produce sustainable environmental quality results commensurate with the commitment of resources.

VIII.C.1. Sustainability Metrics

The Gloucester WPCF currently uses polymer addition to enhance settling, which provides for advanced primary treatment; this is considered as the baseline alternative. The sustainability metrics evaluation of this alternative is based on plant processes, operation, and performance. For comparative purposes, it was assumed that a secondary treatment plant would be built and that the existing primary treatment facilities would remain.²⁷ The main differences between these two alternatives, then, are that secondary treatment would require several (as many as six) additional processes, but would eliminate the need to add polymer at the primary clarifiers.

The following goals were selected to compare the sustainability of the change from advanced primary treatment to secondary treatment, as measured by the environmental and social impact that would result from that change:

- **Biosolids.** Minimize the generation of wastewater residuals. The potential impact of increased residuals generation on regional residuals processing, demand and disposal capacity is a significant factor.²⁸
- **Greenhouse Gas Emissions.** Minimize greenhouse gas (GHG) pollution from electricity and fuel consumption (and related transportation) during construction and operation.
- **Other Air Pollutants.** Minimize other air pollution other than GHG emissions, primarily criteria pollutants from electricity and fuel consumption (and related transportation) during construction and operation.
- **Water Quality.** Minimize water quality impacts from the effluent discharge.
- **Land Resources.** Conserve land resources for beneficial uses by future generations.
- **Economic Impacts.** Maximize the benefit/cost ratio of environmental decisions to ensure the most environmental benefit for limited public moneys in an increasingly difficult municipal financial setting.
- **Social Impacts.** Ensure that environmental decisions provide maximize sustainability of local employment, promote environmental justice and minimize negative secondary and tertiary impacts (higher commuting distances, housing prices, etc.).

²⁷ This is probably not the case. The existing WPCF is on a site with serious expansion limitations. The land requirements for secondary treatment would most probably require relocating the existing WPCF to a new site of 10 acres or more. Given the land availability in Gloucester this would be extremely difficult and expensive.

²⁸ There is a general need to greatly reduce the volume of all forms of solid waste, including wastewater residuals, to extend the useful life of available landfills, and not create unnecessary additional waste. Although the Gloucester WPCF currently sends its processed residuals to New England Fertilizer for beneficial reuse, there is no certainty that this market will continue. In addition, all disposal options have their own environmental consequences and sustainability problems.

VIII.C.2. Sustainability of Denial of 301(h) Waiver for Gloucester WPCF

The following table demonstrates that EPA's decision to require a secondary WPCF violates the above sustainability metrics.

Sustainability Issues Related to the EPA's Waiver Denial Decision

Sustainability Metric	Sustainability Outcome	Magnitude of Change
GHG Emissions	Reduced	There would be an increase of CO ₂ (e) (carbon dioxide equivalent; a combination of CO ₂ , CH ₄ and N ₂ O) emissions during construction; and an increase of CO ₂ (e) annual emissions during operation.
Air Pollutant Emissions	Reduced	There would be an increase of CO, NOx, particulate matter (PM10 and PM2.5), and SO ₂ during construction. Additional power consumption required for operating a secondary treatment facility would increase NOx and SO ₂ emissions.
Biosolids Impact on Landfill Capacity	Reduced	Biosolids quantities would increase by more than two-fold, with associated solids disposal issues. (It is well-established that secondary treatment generates significantly more sewage sludge for disposal compared to the amount produced by primary treatment. In fact, a Federal court noted this as one of the main reasons it rejected secondary treatment for San Diego, California, in <i>United States v. City of San Diego</i> , 1994 WL 521216, *5-6 (S.D. Cal. 1994).
Land resources	Substantially Reduced	Additional requirement for 10 to 12 acres for a new wastewater plant would severely strain very limited land resources in the City
Economic impacts	Substantially Reduced	Burden to the ratepayers in Gloucester of between \$50 M and \$70M in new debt, as well as substantially higher operating costs, which, along with other regulatory requirements (CSO, stormwater, CMOM, etc.), will seriously inhibit the ability of the town to operate, maintain, repair and replace its existing water and wastewater infrastructure and create a debt burden that severely compromises the financial capacity of the town to provide other basic municipal services.
Social impacts	Substantially Reduced	Increased wastewater user rates would seriously impact local business survival, especially in the food processing industry, resulting in further relocations out of the City, consequent reduction in jobs, reduction in City revenues, further reallocation of the costs of services to residential customers, resulting in extreme unaffordability and associated negative impacts to the already stressed housing market and the provision of public services such as education and public safety. (See Financial Assessment and Affordability section)
Water Quality Benefits	No change	There would be no measurable improvement in water quality, no increase in human use benefits and no measurable reduction in risk to either human or aquatic water uses. There would be a reduction of effluent BOD and TSS loads; however, these are not pollutants of concern and the existing plant meets permit and water quality requirements for the parameters.
Noise/Odor/Traffic Impacts to the Community	Reduced	There would be a relatively large increase in noise/odor/traffic impacts during construction. These impacts would be reduced, but still incrementally present, during operation due to increased solids management and disposal needs.

The following impacts are not included in the above analysis, but are still very real and not avoidable if the WPCF were to be converted from advanced primary treatment to secondary treatment.

- Fuel consumption associated with shipping the materials to the point of distribution and fuels used by the vehicle and machinery of manufacturing facilities
- Harvesting of raw material for manufacturing
- Travel of construction and operations personnel to and from the site

Thus, the resource needs and associated impacts for converting from advanced primary treatment to secondary treatment are understated in this analysis.

In conclusion, EPA's tentative decision to deny the 301(h) waiver for the Gloucester WPCF, which has been in place for over 25 years, is directly in conflict with critical sustainability principles as outlined above. The EPA decision seriously violates the goal of both the federal government and the Commonwealth of Massachusetts that environmental decisions produce sustainable environmental quality results commensurate with the commitment of resources. The 301(h) waiver should be granted.

IX. CONCLUSION

The City's comments have demonstrated the following points:

1. EPA's assertion that the WPCF discharge will not meet water quality standards as required by Section 301(h) is incorrect. In fact, the Gloucester discharge satisfies MWQS criteria at and beyond the boundary of the ZID, and the permit limit exceedances noted by EPA were either corrected by upgrades to the WPCF or are due to minor operational problems common in virtually every wastewater treatment plant, regardless of the level of treatment provided. Based on a sustainability analysis, the current discharge is preferable to secondary treatment and has less impact on environmental resources.
2. EPA has cited no actual impacts to human, aquatic or other environmental uses of the waters in the area of the discharge. Twenty years of data from the discharge location confirm that there is, in fact, no measurable impact due to the discharge.
3. The tentative denial is founded on mis-application and mis-interpretation of fundamental principles of water quality impairment, dilution and dispersion in the marine environment and risk to human and aquatic uses. It is based on technicalities of policies and regulations that point to minor operational issues that have already been or are being corrected, to justify enormous capital expenditure that will provide no improvement to water quality or beneficial uses, thus subverting the express intent of the 301(h) provision in the law.
4. The enormous additional capital and operating cost of secondary treatment will dramatically and negatively impact the ability of the City of Gloucester to sustain its critical infrastructure and its basic social, economic and environmental quality of life, including its ability to provide basic public services such as public safety and infrastructure.

The capital expenditure of \$60 million for a secondary treatment facility is not the answer to historical problems that have been fundamentally operational in nature and have, in fact, been

corrected. The expenditure and resulting annual debt resulting from construction of an unnecessary secondary WPCF would severely threaten the ability of the City to commit adequate O&M budgets necessary to ensure proper operation, maintenance and performance of the facility. The City is committed to providing sufficient operating budget into the future to ensure proper maintenance and operation of the existing facility, which will enable it to continue to meet all of the criteria of Section 301(h).

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