

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. § 1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, § 26-53),

Lobster Trap Company, Inc.

is authorized to discharge from the facility located at:

**290 Shore Road
Bourne, MA 02532**

to receiving waters named

Back River, Buzzards Bay River Basin

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the first day of the calendar month immediately following 60 days after signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on April 11, 2005.

This permit consists of: 9 pages in Part I, including effluent limitations, monitoring requirements, and state permit conditions; and 25 pages in Part II, Standard Conditions.

Signed this 6th day of August, 2014

/S/SIGNATURE ON FILE

Ken Moraff, Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

/S/SIGNATURE ON FILE

David Ferris, Director
Massachusetts Waste Water Program
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge **lobster tank recirculation water** from **outfall serial number 001 to the Back River**. Discharges shall be limited and monitored by the permittee as specified below.

| Effluent Characteristic | | Discharge Limitation | | Monitoring Requirement ¹ | |
|--------------------------|-------|----------------------|---------------|-------------------------------------|-------------|
| Parameter | Units | Average Monthly | Maximum Daily | Measurement Frequency | Sample Type |
| Flow Rate | gpd | Report | Report | 1/Week ² | Continuous |
| Temperature, Effluent | °F | Report | Report | 1/Week | Grab |
| Temperature, Influent | °F | Report | Report | 1/Week | Grab |
| Total Nitrogen, Effluent | mg/L | Report | Report | 1/Month | Grab |
| Total Nitrogen, Influent | mg/L | Report | Report | 1/Month | Grab |

See footnotes on pages 3-4

2. During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge **treated effluent from fish processing** from **outfall serial number 001 to the Back River**. Discharges shall be limited and monitored by the permittee as specified below.

| Effluent Characteristic | | Discharge Limitation | | Monitoring Requirement ¹ | |
|-----------------------------|-----------|----------------------|---------------|-------------------------------------|------------------------|
| Parameter | Units | Average Monthly | Maximum Daily | Measurement Frequency | Sample Type |
| Flow Rate | gpd | Report | 3500 | 1/Week ² | Continuous |
| BOD ₅ | lbs/day | 3.20 | 6.60 | 2/Month | Composite ³ |
| TSS | lbs/day | 3.29 | 8.25 | 2/Month | Composite ³ |
| Total Nitrogen | mg/L | Report | Report | 1/Month | Composite ³ |
| pH | s.u. | 6.5 – 8.5 | | 1/Week | Grab |
| Fecal coliform ⁴ | cfu/100ml | 14 | 28 | 2/Month | Grab |
| Enterococcus ⁴ | cfu/100ml | -- | Report | 2/Month | Grab |
| Oil & Grease | lbs/day | 0.19 | 0.42 | 1/Month | Grab |
| Fish Processing Production | lbs/day | Report | Report | 1/Day | Estimate |

Footnotes:

- Effluent samples for flow and temperature at Outfall 001 required in Part I.A.1. (lobster tank recirculation) shall be representative of the discharge and collected prior to mixing with either the fish processing waste stream or the receiving water. Effluent samples for total nitrogen at Outfall 001 required in Part I.A.1. shall be collected after mixing with the fish processing waste stream and prior to mixing with the receiving water and shall be representative of the combined discharge from the lobster tank recirculation and fish processing waste streams. Influent samples for temperature and total nitrogen required in Part I.A.1. shall be collected from undiluted Back River water just prior to entering the intake and shall be collected on the same day that effluent samples are collected. All required effluent samples for Outfall 001 required in Part I.A.2. (fish processing) shall be representative of the discharge and collected from the tap located on the industrial wastewater treatment system discharge pipe prior to mixing with either the lobster tank waste streams or the receiving water. Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP. All samples shall be collected and tested in accordance with the procedures in 40 CFR §136.
- Report total flow for the day of sampling.
- A composite sample shall consist of at least eight (8) grab samples taken hourly during a

consecutive 8-hour period.

4. Fecal coliform and enterococcus monitoring shall be conducted year round. Fecal coliform discharges shall not exceed a monthly geometric mean of 14 colony forming units (cfu) per 100 ml, nor shall they exceed 28 cfu per 100 ml as a daily maximum. Monitoring for enterococcus shall be performed concurrently with the fecal coliform sample.

Part I. A. (continued)

3. The discharge shall not cause a violation of the water quality standards of the receiving water or interfere with the attainment of any designated or existing uses of the Back River.
4. The pH of the effluent shall not be less than 6.5 nor greater than 8.5 standard units (s.u.) at any time, and not more than 0.2 s.u. outside the natural background range, unless these values are exceeded due to natural causes.
5. The discharge shall not cause color or turbidity in concentrations or combinations that are aesthetically objectionable.
6. The discharge shall not contain floating solids, suspended, or settleable solids in concentrations or combinations that would impair any use assigned to Class SA waters.
7. The discharge shall not contain visible oil and grease.
8. The permittee shall not discharge into the receiving water any pollutant or combination of pollutants in toxic amounts.
9. No components of the effluent shall result in any demonstrable harm to aquatic life or violate any water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards, with the permittee being so notified.
10. Use of any chemicals, medicines, and feed is prohibited without the written permission of EPA and MassDEP. If the permittee wishes to use chemicals, medicines, or feed in the lobster holding tanks in the future, the permittee shall send a request to EPA and MassDEP, including the materials, their proposed use, and their potential toxicity in the receiving water.
11. The lobster holding tanks shall be cleaned periodically but not less than once per year. Discharge of any solids to Outfall 001 is prohibited. All debris shall be removed and disposed of in accordance with federal, state, and local regulations.

12. After at least two years of nitrogen monitoring data, the permittee may request a reduction in the frequency of monitoring. The permittee shall continue to collect nitrogen data in accordance with Part I.A.1 until it has received written permission from EPA approving reduced monitoring frequency.
13. In accordance with 40 Code of Federal Regulations (CFR) § 122.42, all existing manufacturing, commercial, mining, and silvicultural discharges must notify the Regional Administrator as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile, five hundred micrograms per liter (500 µg/L) for 2,4,-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
 - (4) Any other notification level established by the Regional Administrator in accordance with 40 CFR § 122.44(f) and Massachusetts regulations.
 - b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) One milligram per liter (1 mg/L) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
 - (4) Any other notification level established by the Regional Administrator in accordance with 40 CFR § 122.44(f) and Massachusetts regulations.
 - c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct of any toxic pollutant which was not reported in the permit application.

14. This permit shall be modified in accordance with 40 CFR § 122.62(a)(3) if the standards or regulations on which the permit is based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit is issued in accordance with 40 CFR § 122.62(a)(3).
15. Any change in the species to be processed and/or held at this facility will require written notification to EPA and MassDEP and possible permit modification.

B. BEST MANAGEMENT PRACTICES

The permittee shall implement the following Best Management Practices (BMPs). The permittee shall also develop a written Best Management Practices (BMP) Plan for the facility and make it available to EPA and MassDEP for review at all times. The BMP plan shall, at a minimum, include the following practices consistent with the effluent limitations guidelines for flow-through and recirculating systems at 40 CFR Part 451.

1. In order to minimize the discharge of accumulated solids from holding tanks, the permittee shall identify and implement procedures for routine cleaning of holding tanks which shall minimize the discharge of any accumulated solids during the inventorying, grading, and harvesting of aquatic animals.
2. The permittee shall remove and dispose of aquatic animal mortalities properly on a regular basis to prevent discharge to waters of the U.S.
3. The permittee shall inspect the holding tanks and wastewater treatment system on a routine basis in order to identify and promptly repair any damage.
4. The permittee shall conduct regular maintenance of the holding tanks and the wastewater treatment system to ensure their proper function.
5. The permittee shall identify the sources of nitrogen and quantify nitrogen loading from the seafood processing operation effluent, including monitoring of the fish processing waste stream prior to mixing with either the lobster tank recirculation water or the receiving water. Results of the nitrogen study shall be submitted to EPA and MassDEP **within 60 days of completing at least two years of data collection as required in Part I.A.1 and Part I.A.2** and shall describe the potential nitrogen contribution to the receiving water from the seafood processing operation.
6. The permittee shall keep records documenting the frequency of cleaning, maintenance, and repairs.
7. The permittee shall train personnel on the proper operation and cleaning of holding tanks and wastewater treatment systems including the proper use of equipment.

C. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfall listed in Part I.A.1 and I.A.2 of this permit. Discharges of wastewater from any other point sources are not authorized by this permit and shall be reported in accordance with Part II.D.1.e. of this permit (Twenty-four hour reporting).

D. MONITORING AND REPORTING

1. **For a period of one year from the effective date of the permit**, the permittee may either submit monitoring data and other reports to EPA in hard copy form or report electronically using NetDMR, a web-based tool that allows permittees to electronically submit discharge monitoring reports (DMRs) and other required reports via a secure internet connection. **Beginning no later than one year after the effective date of the permit**, the permittee shall begin reporting using NetDMR, unless the facility is able to demonstrate a reasonable basis that precludes the use of NetDMR for submitting DMRs and reports. Specific requirements regarding submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

- a. Submittal of Reports Using NetDMR

NetDMR is accessed from: <http://www.epa.gov/netdmr>. **Within one year of the effective date of this permit**, the permittee shall begin submitting DMRs and reports required under this permit electronically to EPA using NetDMR, unless the facility is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMRs and reports (“opt out request”).

DMRs shall be submitted electronically to EPA no later than the 15th day of the month following the completed reporting period. All reports required under the permit shall be submitted to EPA, including the MassDEP Monthly Operations and Maintenance Report, as an electronic attachment to the DMR. Once a permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to EPA and will no longer be required to submit hard copies of DMRs to MassDEP. However, permittees shall continue to send hard copies of reports other than DMRs (including Monthly Operation and Maintenance Reports) to MassDEP until further notice from MassDEP.

- b. Submittal of NetDMR Opt Out Requests

Opt out requests must be submitted in writing to EPA for written approval at least sixty (60) days prior to the date a facility would be required under this permit to begin using NetDMR. This demonstration shall be valid for twelve (12) months from the date of EPA approval and shall thereupon expire. At such time, DMRs and reports shall be

submitted electronically to EPA unless the permittee submits a renewed opt out request and such request is approved by EPA. All opt out requests should be sent to the following addresses:

**Attn: NetDMR Coordinator
U.S. Environmental Protection Agency, Water Technical Unit
5 Post Office Square, Suite 100 (OES04-4)
Boston, MA 02109-3912
and**

**Massachusetts Department of Environmental Protection
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608**

c. Submittal of Reports in Hard Copy Form

Monitoring results shall be summarized for each calendar month and reported on separate hard copy Discharge Monitoring Report Form(s) (DMRs) postmarked no later than the 15th day of the month following the completed reporting period. MassDEP Monthly Operation and Maintenance Reports shall be submitted as an attachment to the DMRs. Signed and dated originals of the DMRs, and all other reports or notifications required herein or in Part II shall be submitted to the Director at the following address:

**U.S. Environmental Protection Agency
Water Technical Unit (OES04-SMR)
5 Post Office Square - Suite 100
Boston, MA 02109-3912**

Duplicate signed copies of all reports or notifications required above shall be submitted to the State at the following addresses:

**MassDEP – Southeast Region
Bureau of Waste Prevention
20 Riverside Drive
Lakeville, MA 02347**

and

**Massachusetts Department of Environmental Protection
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608**

Any verbal reports, if required in **Parts I** and/or **II** of this permit, shall be made to both EPA New England and to MassDEP.

Duplicate signed copies of DMRs required by this permit shall also be submitted to the Massachusetts Division of Marine Fisheries at:

**Division of Marine Fisheries
Shellfish Management Program
1213 Purchase Street
New Bedford, MA 02740**

E. STATE PERMIT CONDITIONS

1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state surface water discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and 314 C.M.R. 3.00. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 CMR 3.19, are hereby incorporated by reference into this state surface water discharge permit.
2. This authorization also incorporates the state water quality certification issued by MassDEP under § 401(a) of the Federal Clean Water Act, 40 C.F.R. 124.53, M.G.L. c. 21, § 27 and 314 CMR 3.07. All of the requirements (if any) contained in MassDEP's water quality certification for the permit are hereby incorporated by reference into this state surface water discharge permit as special conditions pursuant to 314 CMR 3.11.
3. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES PURSUANT TO
THE CLEAN WATER ACT (CWA)

NPDES PERMIT NUMBER: **MA0029092**

PUBLIC NOTICE START AND END DATES: April 18, 2011 through May 17, 2011

NAME AND MAILING ADDRESS OF APPLICANT:

Lobster Trap Company, Inc.
P.O. Box 3007
Bourne, MA 02532

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Lobster Trap Company, Inc.
290 Shore Road
Bourne, MA 02532

RECEIVING WATER(S): **Back River, Buzzards Bay Watershed**

RECEIVING WATER CLASSIFICATION(S): **Class SA**

SIC CODE: **2092**

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ATTACHMENT B - Flow Schematic

ATTACHMENT C - Discharge Monitoring Report Summary

ATTACHMENT D - Effluent Limit Calculations

I. Proposed Action, Type of Facility, and Discharge Location

The Lobster Trap Company, Inc. (LTC or the permittee) operates a raw fin fish processing and lobster holding facility in Bourne, MA (see Attachment A for site location). LTC has applied to the U.S. Environmental Protection Agency (EPA) for reissuance of its NPDES permit to discharge into the designated receiving water. The last permit was issued in April 2005 and expired on June 10, 2010. EPA received a permit renewal application from LTC dated November 23, 2009. Since the permit renewal application was deemed timely and complete by EPA, the permit has been administratively continued.

LTC is a wholesaler of fresh and frozen seafood. The facility receives raw finfish (e.g., flounder, sole, cod, and similar species), which are filleted, bulk packed, and cold stored until shipment to wholesalers and restaurants. According to a November 23, 2009 letter

from the permittee, the current production rate for the fish processing plant averages 4,500 pounds per day (lbs/day) with a maximum daily production rate of 5,500 lbs/day. In addition, the facility operates a flow-through lobster holding system for sale and delivery to retail customers. At any time, the facility has the capacity to hold approximately 50,000 to 150,000 pounds of live lobster. No food or medications are administered to the lobster at this facility.

II. Description of Discharges

The discharge consists of treated process wastewater and floor washdown from fin fish filleting, and bead filter backwash and tank carryover from lobster holding tanks (see line flow diagram included as Attachment B to the Fact Sheet). During processing of fin fish, approximately 1,900 gallons per day (gpd) of freshwater are used for rinsing, which is collected in a wastewater tank. Solids are separated with a static hydroscreen, and the effluent is disinfected with ozone in the effluent collection tank and discharged via Outfall 001.

In the flow-through lobster holding tanks, water from the Back River is pumped at a constant rate of approximately 60 gallons per minute (86,400 gpd) through three 45,000-gallon indoor tanks and recycled through the holding tanks after treatment through one of three bead filters. The filter backwash is screened prior to discharge and solids are disposed at an off-site waste facility. An additional 1,500 gpd of untreated flow-through overflow water from the holding tanks is also discharged via Outfall 001. Flows into the facility and from the lobster tanks pass through a heat exchanger to regulate the temperature for the lobster recirculation water. According to the permittee, the temperature of the discharge to Outfall 001 is approximately 1°F less than ambient seawater temperature. No food or medications are used in the lobster holding facility.

III. Receiving Water Description

Back River, a tidal river off of Phinneys Harbor in Bourne, MA, is a Class SA water body under the Massachusetts Surface Water Quality Standards (314 CMR 4.06). Class SA waters are designated as an excellent habitat for fish, other aquatic life, and wildlife, and for primary and secondary contact recreation. In approved areas they shall be suitable for shellfish harvesting without depuration (called Open Shellfish Areas). These waters shall have excellent aesthetic value. [314 CMR 4.05(4)(a)].

Back River is part of the Bourne Back River and headwaters wetlands Area of Critical Environmental Concern (ACEC). The ACEC, which includes the Back River watershed and associated downstream tidal areas, was designated in 1989 due to the presence of critical resources, including marsh, tidal flat, and freshwater wetland habitat; nursery and spawning areas; storm damage prevention; and presence of state and/or federally-listed threatened and endangered species. In addition, the Back River Estuary is recognized by EPA as part of Buzzards Bay, which is an Estuary of National Significance.

Section 303(d) of the Federal Clean Water Act (CWA) requires states to identify those waterbodies that are not expected to meet surface water quality standards after the implementation of technology-based controls. Back River is listed as impaired for pathogens in the current 303(d) list (Massachusetts Year 2008 Integrated List of Waters). According to the Massachusetts Department of Environmental Protection's (MassDEP) 2000 Water Quality Assessment, shellfish harvesting as a designated use is impaired for the Back River due to the presence of fecal coliform bacteria likely resulting from municipal separate storm sewer systems and septic systems. In May 2009, the final Pathogen Total Maximum Daily Load (TMDL) for Buzzards Bay was approved by EPA [<http://www.mass.gov/dep/water/resources/buzzbay1.pdf>] and the segment was moved to Category 4a ("TMDL is completed") in the Draft 2010 303(d) List. The Massachusetts Division of Marine Fisheries has identified the growing area in the Back River as conditionally approved (BB47.1 and BB47.2), except in the vicinity of Outfall 001 (BB47.3), in which shellfish harvesting is prohibited.¹

IV. Permit Basis: Statutory and Regulatory Authority

1. General Requirements

The Clean Water Act (CWA) prohibits the discharge of pollutants to waters of the United States without a NPDES permit unless such a discharge is otherwise authorized by the CWA. The NPDES permit is the mechanism used to implement technology and water quality-based effluent limitations and other requirements including monitoring and reporting. This Draft NPDES permit was developed in accordance with various statutory and regulatory requirements established pursuant to the CWA and applicable State regulations. During development, EPA considered the most recent technology-based treatment requirements, water quality-based requirements, and all limitations and requirements in the current/existing permit. The regulations governing the EPA NPDES permit program are generally found at 40 CFR Parts 122, 124, 125, and 136. The general conditions of the Draft Permit are based on 40 CFR §122.41 and consist primarily of management requirements common to all permits. The effluent monitoring requirements have been established to yield data representative of the discharge under authority of Section 308(a) of the CWA in accordance with 40 CFR §122.41(j), §122.44(i) and §122.48.

2. Technology-Based Requirements

Subpart A of 40 CFR §125 establishes criteria and standards for the imposition of technology based treatment requirements in permits under Section 301(b) of the CWA, including the application of EPA promulgated effluent limitations and case-by-case determinations of effluent limitations under Section 402(a)(1) of the CWA.

Technology-based treatment requirements represent the minimum level of control that must be imposed under Sections 301(b) and 402 of the CWA (see 40 CFR §125 Subpart

¹ Massachusetts Division of Marine Fisheries. 2009. Designated Shellfish Growing Area. BB47: Back River. Updated September 10, 2009.

A) to meet best practicable control technology currently available (BPT) for conventional pollutants and some metals, best conventional control technology (BCT) for conventional pollutants, and best available technology economically achievable (BAT) for toxic and non-conventional pollutants. In general, technology-based effluent guidelines for non-POTW facilities must be complied with as expeditiously as practicable but in no case later than three years after the date such limitations are established and in no case later than March 31, 1989 (see 40 CFR §125.3(a)(2)). Compliance schedules and deadlines not in accordance with the statutory provisions of the CWA can not be authorized by a NPDES permit.

On December 1, 1975, EPA promulgated technology-based National Effluent Limitation Guidelines (ELGs) for the Seafood Processing Point Source Category at 40 CFR Part 408, Subpart U, Non-Alaskan Conventional Bottom Fish Processing Subcategory, which applies to the discharge of fish processing water from LTC. The provisions apply to all existing facilities processing more than 4,000 pounds of raw material per day on any day during a calendar year and all new sources.

The current permit limits were calculated by applying the ELGs for new sources at 40 CFR §408.215. According to discharge monitoring reports (DMRs) submitted during the last permit cycle, LTC has consistently met the current permit limits (see Attachment B). The promulgated ELGs for new sources contain mass-based numerical effluent limitations on the discharge of biochemical oxygen demand (BOD₅ - a daily maximum 1.2 pounds per 1,000 pounds of fish and average monthly 0.71 pounds per 1,000 pounds of fish), total suspended solids (TSS – a daily maximum 1.5 pounds per 1,000 pounds of fish and average monthly 0.73 pounds per 1,000 pounds of fish), oil and grease (a daily maximum 0.077 pounds per 1,000 pounds of fish and average monthly 0.042 pounds per 1,000 pounds of fish), and pH (within the range 6.0 to 9.0 standard units). In the Draft Permit, the numeric limits for these pollutants are also based on the ELGs for new sources at 40 CFR §408.215 consistent with antibacksliding provisions at 40 CFR §122.44(l). However, the numeric limits in the Draft Permit have increased from the current permit because they are production-based limits and production has increased since the last permit cycle.

On August 23, 2004, EPA promulgated technology-based ELGs for the Concentrated Aquatic Animal Production Point Source Category at 40 CFR Part 451, Subpart A, Flow-through and Recirculating Systems Subcategory for facilities that contain, hold, or produce more than 100,000 pounds of aquatic animals per year (69 FR 51906). Because LTC holds more than 100,000 pounds of lobster annually in the lobster recirculation tanks, the ELGs are applicable to this facility. The promulgated ELGs contain narrative effluent limitations with specific provisions for solids control, materials storage, structural maintenance, recordkeeping, and training. The Draft Permit applies these ELGs through requirements to implement best management practices (BMPs).

The effluent monitoring requirements have been established to yield data representative of the discharges under the authority of Section 308(a) of the CWA, according to regulations set forth at 40 CFR §§ 122.41(j), 122.44(i) and 122.48. The approved

analytical procedures are to be found in 40 CFR § 136 unless other procedures are explicitly required in the permit.

3. Water Quality-Based Requirements

Water quality-based criteria are required in NPDES permits when EPA and the State determine that effluent limits more stringent than technology-based limits are necessary to maintain or achieve state or federal water-quality standards (See Section 301(b) (1)(C) of the CWA). Water quality-based criteria consist of three (3) parts: 1) beneficial designated uses for a water body or a segment of a water body; 2) numeric and/or narrative water quality criteria sufficient to protect the assigned designated use(s) of the water body; and 3) anti-degradation requirements to ensure that once a use is attained it will not be degraded. The Massachusetts State Water Quality Standards, found at 314 CMR 4.00, include these elements. The State Water Quality Regulations limit or prohibit discharges of pollutants to surface waters and thereby assure that the surface water quality standards of the receiving water are protected, maintained, and/or attained. These standards also include requirements for the regulation and control of toxic constituents and require that EPA criteria, established pursuant to Section 304(a) of the CWA, be used unless site-specific criteria are established. EPA regulations pertaining to permit limits based upon water quality standards and state requirements are contained in 40 CFR §122.44(d).

Section 101(a)(3) of the CWA specifically prohibits the discharge of toxic pollutants in toxic amounts. The Commonwealth of Massachusetts has a similar narrative criteria in their water quality regulations that prohibits such discharges [See Massachusetts 314 CMR 4.05(5)(e)]. The effluent limits established in the Draft Permit assure that the surface water quality standards of the receiving water are protected, maintained, and/or attained.

4. Antibacksliding

EPA's anti-backsliding provision as identified in Section 402(o) of the Clean Water Act and at 40 CFR §122.44(l) prohibits the relaxation of permit limits, standards, and conditions unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued. Anti-backsliding provisions apply to effluent limits based on technology, water quality, best professional judgment (BPJ) and State Certification requirements. Relief from antibacksliding provisions can only be granted under one of the defined exceptions (see 40 CFR §122.44(l)(2)(i)). Effluent limits for flow, pH, and bacteria in the Draft Permit are as stringent as or more stringent than the current permit. Effluent limits for BOD₅, TSS, and oil and grease have increased from the current permit because they are based on fish production, which has increased since the last permit cycle. Regulations at 40 CFR §122.44(l)(2)(i)(B)(1) allow for an exception to antibacksliding when "information is available which was not available at the time of permit issuance and which would have justified the application of a less stringent effluent limit at the time of permit issuance."

In this case, the application of the ELGs to the current production levels at the facility meets the exception for new information.

5. Antidegradation

Federal regulations found at 40 CFR § 131.12 require states to develop and adopt a statewide antidegradation policy which maintains and protects existing instream water uses and the level of water quality necessary to protect the existing uses, and maintains the quality of waters which exceed levels necessary to support propagation of fish, shellfish, and wildlife and to support recreation in and on the water. The Massachusetts Antidegradation Regulations are found at Title 314 CMR 4.04. EPA anticipates that the MassDEP shall make a determination that there shall be no significant adverse impacts to the receiving water and no loss of existing uses as a result of the discharge authorized by this permit.

The increase in numeric limits for BOD₅, TSS, and oil and grease resulting from the increase in production levels from the last permit cycle are not expected to adversely impact water quality and will continue to protect the existing uses of the Back River. As such, EPA expects that discharge will continue to maintain a high level of water quality necessary to support the existing and designated uses of the Back River, including aquatic life and recreation.

6. State Certification

Under Section 401 of the CWA, EPA is required to obtain certification from the state in which the discharge is located that all water quality standards or other applicable requirements of state law, in accordance with Section 301(b)(1)(C) of the CWA, are satisfied. EPA permits are to include any conditions required in the state's certification as being necessary to ensure compliance with state water quality standards or other applicable requirements of state law. See CWA Section 401(a) and 40 CFR §124.53(e). Regulations governing state certification are set out at 40 CFR §124.53 and §124.55. EPA regulations pertaining to permit limits based upon water quality standards and state requirements are contained in 40 CFR §122.44(d).

V. Effluent Limitations and Monitoring Requirements in the Permit

1. Flow

The current permit includes a maximum daily flow limit of 3,500 gpd of treated effluent from fin fish processing to Outfall 001. The average maximum daily flow of fish processing water between July 2005 and June 2009 was 1,920 gpd. A maximum daily flow in excess of the current permit limit (3,500 gpd) was reported on 5 occasions between July 2005 and June 2009 (see Attachment C). The last exceedance occurred in April 2007. The Draft Permit continues the maximum daily limit of 3,500 gpd of fish processing water to Outfall 001. In addition, the Draft Permit requires the permittee to report average monthly flow of fish processing water to Outfall 001.

The current permit also requires the permittee to report the average monthly and maximum daily flows of lobster tank recirculation water to Outfall 001. The permittee reported a maximum daily flow of 84,960 gpd of lobster tank recirculation water between July 2005 and June 2009. This flow is equivalent to about 59 gallons per minute, which the permittee reported as a maximum discharge from the bead filters in the 2009 permit application. The Draft Permit requires the permittee to report average monthly and daily maximum flow of lobster tank recirculation water at Outfall 001. Flows shall continue to be estimated on a weekly basis for both fin fish process and lobster tank wastewater.

2. BOD₅, TSS, Oil and Grease

As described in Section IV of this Fact Sheet, EPA has applied the technology-based ELGs found at 40 CFR Part 408, Subpart U, Non-Alaskan Conventional Bottom Fish Processing Subcategory for biochemical oxygen demand (BOD₅), total suspended solids (TSS), and oil and grease consistent with requirements for new sources at 40 CFR § 408.215.

Federal regulations at 40 CFR 122.45(b)(2)(i) require that EPA establish production based limits on actual production, and that the time period of the measure of production shall correspond to the time period of the calculated permit limits. The limits for BOD₅, TSS, and oil and grease in the current permit were based on production rates of 4,000 lbs/day (average monthly) and 5,000 lbs/day (maximum daily). Average and maximum production has increased since the last permit was issued. According to the discharge monitoring reports (DMRs) from the last permit cycle (July 2005 to June 2009), the permittee's average monthly and maximum daily reported values for these three pollutants were less than the permitted limits (see Attachment C). In addition, levels of these pollutants (after the sampling location) are diluted upon combining with the higher volume waste stream from the lobster holding tanks prior to discharge to the receiving water.

EPA used average and maximum daily production values of 4,500 lbs/day and 5,500 lbs/day (reported by the permittee in the November 23, 2008 permit application) to calculate the limits in the Draft Permit. Based on these production rates, the technology-based monthly average limits for BOD₅, TSS, and oil and grease are 3.20, 3.29, and 0.19 lbs/day, and the maximum daily limits are 6.60, 8.25, and 0.42 lbs/day, respectively (see Attachment D for calculation of permit limits). Technology-based effluent limits must be met at the sampling point, which is a tap located on the discharge pipe from the fin fish processing wastewater treatment system.

3. pH

The Draft Permit requires a maximum pH within the range of 6.5 through 8.5 standard units (s.u.) based on Massachusetts Water Quality Standards for Class SA waters continued from the current permit. In this case, the pH limit is based on water quality because the standard is more stringent than the technology-based limits in the existing

source effluent guidelines (6.0 – 9.0 s.u.) at 40 CFR § 408.212. DMRs from the last permit cycle report one minimum pH value less than 6.5 (6.31 s.u.) and two maximum pH values more than 8.5 (8.64 and 8.67 s.u.) (see Attachment C). Because the reported minimum and maximum pH levels at LTC exceeded the water quality standards, EPA concludes there is a reasonable potential for the discharge to cause or contribute to an excursion above a State water quality standard, and the Draft Permit includes a limit for pH.

4. Temperature

The Draft Permit includes a narrative requirement that prohibits the discharge from causing a violation of water quality standards or interfering with the attainment of designated uses (Part I.A.3). State water quality standards for temperature in Class SA waters at 314 CMR 4.05(4)(a)(2)(a) state that the temperature shall not exceed 85°F nor a maximum daily mean of 80°F and the rise in temperature due to a discharge shall not exceed 1.5°F. There is currently no available temperature data for Outfall 001. The discharge to Outfall 001 from the lobster holding tanks is exposed to heat exchangers, which may alter the temperature. However, according to LTC, the lobster holding facility is maintained at a cool temperature and the discharge is generally lower than ambient temperatures in the Back River. Therefore, EPA does not expect that the effluent has a reasonable potential to cause instream temperatures to exceed water quality standards. State water quality standards for temperature at 314 CMR 4.05(4)(a)(2)(b) states that “there shall be no change from natural background that would impair any uses assigned to this class including those conditions necessary to protect normal species diversity, successful migration, reproductive functions or growth of aquatic organisms.” To ensure that natural background temperatures are maintained consistent with this water quality requirement, the Draft Permit requires weekly monitoring of the ambient and discharge temperatures at Outfall 001.

5. Bacteria

The Draft Permit carries forward bacteria monitoring for fecal coliform consistent with antibacksliding and based on Massachusetts Surface Water Quality Standards at 314 CMR 4.05(4)(a)(4) for approved shellfish harvesting areas. For fecal coliform, the monthly geometric mean must not exceed 14 colony forming units (cfu) per 100 ml and no sample can exceed a maximum daily limit of 28 cfu/100 ml. DMRs from the last permit cycle indicate that total coliform in the discharge to Outfall 001 ranged from 1 to 8 colonies per 100/mL, which is below the current permit limit (see Attachment C). In addition, EPA has established a monthly monitoring requirement for *Enterococci* to gather information for determining whether the discharge has the reasonable potential to cause or contribute to exceedances of recently promulgated state water quality criteria established to protect primary contact recreational uses (see 314 CMR 4.05(4)(a)(4)(b) dated December 29, 2006 and approved by EPA on September 19, 2007). No limit is established at this time. EPA will review the results, and if necessary, reopen the permit

and impose a limit. These water quality-based effluent limits are end-of-pipe water quality criteria established in accordance with state surface water quality standards to ensure that the discharge does not cause or contribute to water quality impairments associated with pathogens.

VI. Best Management Practices

The lobster holding operation is defined as a concentrated aquatic animal production (CAAP) facility because it contains, grows, or holds more than 20,000 pounds of cold water aquatic animals per year, consistent with the threshold as defined in 40 CFR Part 122 Appendix C.

EPA published effluent limitation guidelines for CAAP facilities in 2004 (69 FR 51891, August 23, 2004). These guidelines apply to CAAP facilities that hold or produce over 100,000 pounds of aquatic animals per year in recirculating or net pen systems. Because the lobster holding operation at LTC holds more than 100,000 pounds of lobster per year in a flow-through system, the operation is subject to these effluent guidelines. The guidelines contain no numerical limits; rather, they require specific management practices to minimize the discharge of solids, BOD, and nutrients.

Under the existing permit, the permittee prepared and implemented a best management practices (BMP) plan to establish management practices consistent with the requirements of the effluent limitations guidelines. Additionally, LTC is guided by specific sanitation requirements as a food provider under the Food and Drug Administration Hazard Analysis and Critical Control Point System (HACCP). HACCP requirements include implementation of a Sanitation Management Plan, separate from the BMP plan required in this permit. The Draft Permit requires that the permittee maintain and continue to operate consistent with the existing BMP plan and, in particular, the requirements of 40 CFR § 451.11 as specified in Part I.B. of the Draft Permit.

VII. Essential Fish Habitat

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Services (NMFS) if EPA's action or proposed actions that it funds, permits, or undertakes, may adversely impact any essential fish habitat as: waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (16 U.S.C. § 1802 (10)). "Adversely impact" means any impact which reduces the quality and/or quantity of EFH (50 C.F.R. § 600.910 (a)). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Essential fish habitat is only designated for species for which federal fisheries management plans exist (16 U.S.C. § 1855(b) (1) (A)). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999.

LTC discharges into Back River, which is designated by NMFS as EFH for the following species and applicable life stages:

| Species | Eggs | Larvae | Juveniles | Adults |
|--|------|--------|-----------|--------|
| Atlantic cod (<i>Gadus morhua</i>) | X | X | X | X |
| haddock (<i>Melanogrammus aeglefinus</i>) | X | X | | |
| pollock (<i>Pollachius virens</i>) | | X | X | X |
| whiting (<i>Merluccius bilinearis</i>) | X | X | X | X |
| red hake (<i>Urophycis chuss</i>) | X | X | X | X |
| white hake (<i>Urophycis tenuis</i>) | X | X | X | X |
| winter flounder (<i>Pleuronectes americanus</i>) | X | X | X | X |
| yellowtail flounder (<i>Pleuronectes ferruginea</i>) | X | X | X | X |
| windowpane flounder (<i>Scopthalmus aquosus</i>) | X | X | X | X |
| American plaice (<i>Hippoglossoides platessoides</i>) | X | X | X | X |
| ocean pout (<i>Macrozoarces americanus</i>) | X | X | X | X |
| Atlantic halibut (<i>Hippoglossus hippoglossus</i>) | X | X | X | X |
| Atlantic sea scallop (<i>Placopecten magellanicus</i>) | X | X | X | X |
| Atlantic sea herring (<i>Clupea harengus</i>) | | X | X | X |
| monkfish (<i>Lophius americanus</i>) | X | X | | |
| bluefish (<i>Pomatomus saltatrix</i>) | | | X | X |
| long finned squid (<i>Loligo pealei</i>) | n/a | n/a | X | X |
| short finned squid (<i>Illex illecebrosus</i>) | n/a | n/a | X | X |
| Atlantic butterfish (<i>Peprilus triacanthus</i>) | X | X | X | X |
| Atlantic mackerel (<i>Scomber scombrus</i>) | X | X | X | X |
| summer flounder (<i>Paralichthys dentatus</i>) | | | | X |
| scup (<i>Stenotomus chrysops</i>) | X | X | X | X |
| black sea bass (<i>Centropristus striata</i>) | n/a | | X | X |

| | | | | |
|--|-----|-----|---|---|
| spiny dogfish (<i>Squalus acanthias</i>) | n/a | n/a | | X |
| bluefin tuna (<i>Thunnus thynnus</i>) | | | X | X |

EPA has concluded that the limits and conditions in the Draft Permit minimize adverse effects to EFH for the following reasons:

- The Draft Permit limits the discharge of biochemical oxygen demand, total suspended solids, and oil and grease consistent with the production-based effluent limitations guidelines for seafood processing.
- The Draft Permit limits fecal coliform consistent with the Massachusetts Surface Water Quality Standards for Class SA waters and requires monitoring of *Enterococcus* to determine if there is a reasonable potential to exceed water quality standards for non-bathing beaches.
- The discharge effluent is primarily culture water that supports survival of lobster.
- The Draft Permit prohibits the use of food, chemicals, and/or medicines in the lobster holding tanks.
- The Draft Permit prohibits the discharge from causing violations of the state water quality standards in the receiving water.
- The Draft Permit requires the permittee to continue to follow best management practices consistent with the effluent limitations guidelines for concentrated aquatic animal production facilities.

EPA believes that the Draft Permit limits and requirements adequately protect EFH for the managed species, and therefore additional mitigation is not warranted. NMFS has been notified of this assessment and the agency has been provided with a copy of the Draft Permit and Fact Sheet for review and comment.

VIII. Endangered Species Act

Section 7(a) of the Endangered Species Act of 1973, as amended (ESA) grants authority to and imposes requirements upon Federal agencies regarding endangered or threatened species of fish, wildlife, or plants ("listed species") and habitat of such species that has been designated as critical (a "critical habitat"). The ESA requires every Federal agency, in consultation with and with the assistance of the Secretary of Interior, to insure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. The United States Fish and Wildlife Service (USFWS) administers Section 7 consultations for freshwater species, where as the National Marine Fisheries Service (NMFS) administers Section 7 consultations for marine species and anadromous fish.

As the federal agency charged with authorizing the discharge from this facility, EPA has reviewed available habitat information developed by the Services to see if one or more of the federal endangered or threatened species of fish, wildlife, or plants may be present

within the influence of the discharge. According to the Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program, both the piping plover (*Charadrius melodus*), a federally threatened species, and roseate tern (*Sterna dougallii*), a federally endangered species, may be present in the town of Bourne. Piping plovers are more likely to be found in Sandwich, Barnstable, and Chatham, but several pairs were observed at Sagamore Beach and Mashnee Dike in Bourne.² Roseate terns are most abundant on the islands of Buzzards Bay, including Bird Island in Marion and Ram Island in Mattapoisett.³ The salt marsh and mudflat habitats prevalent in Back River are particularly suitable feeding habitat for shorebirds.

EPA has concluded that discharge from the facility will not result in adverse effects on piping plovers, roseate terns, or intertidal feeding habitat. Discharge from the facility is relatively low volume (approximately 86,000 gallons per day) and the primary discharge (from lobster holding facility) supports the survival of lobster in the holding tanks. The Draft Permit also requires that the discharge meet Massachusetts Surface Water Quality Standards for Class SA waters and/or effluent limitations guidelines for seafood processing and concentrated aquatic animal production facilities. A copy of the Draft Permit and Fact Sheet has been provided to both USFWS and NMFS for review and comment.

IX. Monitoring and Reporting

The effluent monitoring requirements have been established to yield data representative of the discharge under authority of Section 308 (a) of the CWA in accordance with 40 CFR §§122.41 (j), 122.44 (l), and 122.48.

The Draft Permit includes new provisions related to Discharge Monitoring Report (DMR) submittals to EPA and the State. The Draft Permit requires that, no later than one year after the effective date of the permit, the permittee submit all monitoring data and other reports required by the permit to EPA using NetDMR, unless the permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMRs and reports (“opt out request”).

In the interim (until one year from the effective date of the permit), the permittee may either submit monitoring data and other reports to EPA in hard copy form, or report electronically using NetDMR.

NetDMR is a national web-based tool for regulated Clean Water Act permittees to submit discharge monitoring reports (DMRs) electronically via a secure Internet application to U.S. EPA through the Environmental Information Exchange Network. NetDMR allows

² Melvin, S.M., C.S. Mostello. 2007. Summary of 2003 Massachusetts Piping Plover Census Data. Natural Heritage and Endangered Species Program. Massachusetts Division of Fisheries and Wildlife. Westborough, MA.

³ C.S. Mostello. 2006. Inventory of Terns, Laughing Gulls, and Black Skimmers Nesting in Massachusetts in 2005. Natural Heritage and Endangered Species Program. Massachusetts Division of Fisheries and Wildlife. Westborough, MA.

participants to discontinue mailing in hard copy forms under 40 CFR § 122.41 and § 403.12. NetDMR is accessed from the following url: <http://www.epa.gov/netdmr>. Further information about NetDMR, including contacts for EPA Region 1, is provided on this website.

EPA currently conducts free training on the use of NetDMR, and anticipates that the availability of this training will continue to assist permittees with the transition to use of NetDMR. To participate in upcoming trainings, visit <http://www.epa.gov/netdmr> for contact information for Massachusetts.

The Draft Permit requires the permittee to report monitoring results obtained during each calendar month using NetDMR, no later than the 15th day of the month following the completed reporting period. All reports required under the permit shall be submitted to EPA as an electronic attachment to the DMR. Once a permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to EPA and will no longer be required to submit hard copies of DMRs to MassDEP. However, permittees must continue to send hard copies of reports other than DMRs to MassDEP until further notice from MassDEP.

The Draft Permit also includes an “opt out” requests process. Permittees who believe they can not use NetDMR due to technical or administrative infeasibilities, or other logical reasons, must demonstrate the reasonable basis that precludes the use of NetDMR. These permittees must submit the justification, in writing, to EPA at least sixty (60) days prior to the date the facility would otherwise be required to begin using NetDMR. Opt outs become effective upon the date of written approval by EPA and are valid for twelve (12) months from the date of EPA approval. The opt-outs expire at the end of this twelve (12) month period. Upon expiration, the permittee must submit DMRs and reports to EPA using NetDMR, unless the permittee submits a renewed opt out request sixty (60) days prior to expiration of its opt out, and such a request is approved by EPA.

Until electronic reporting using NetDMR begins, or for those permittees that receive written approval from EPA to continue to submit hard copies of DMRs, the Draft Permit requires that submittal of DMRs and other reports required by the permit continue in hard copy format. Hard copies of DMRs and other reports must be postmarked no later than the 15th day of the month following the completed reporting period.

X. State Certification Requirements

EPA may not issue a permit in the Commonwealth of Massachusetts unless MassDEP certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate State Water Quality Standards. MassDEP has reviewed the Draft Permit. EPA has requested permit certification by the State pursuant to 40 CFR 124.53 and expects that the Draft Permit will be certified.

XI. Coastal Zone Management

Section 307(c) of the Coastal Zone Management Act, 16 U.S.C. 1451 et seq. and implementing regulations (15 CFR part 930) prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State Coastal Zone Management (CZM) program, and the State or its designated agency concurs with the certification (or the Secretary of Commerce overrides the State's nonconcurrence).

The discharge is within the defined coastal zone. The permittee must submit a letter to the Massachusetts Coastal Zone Management Program stating its intention to abide by the CZM water quality and habitat policies prior to issuance of the Final Permit. The CZM Program shall review the Draft Permit, and it will only be issued after CZM concurrence with the applicant's certification.

XII. Comment Period, Hearing Requests, and Procedures for Final Decisions

All persons, including applicants, who believe any condition of the Draft Permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the U.S. EPA, Office of Ecosystem Protection Attn: Danielle Gaito, 5 Post Office Square, Suite 100 (OEP06-4), Boston, Massachusetts 02109-3912 or via email to gaito.danielle@epa.gov. Any person, prior to such date, may submit a request in writing for a public hearing to consider the Draft Permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public meeting may be held if the criteria stated in 40 C.F.R. § 124.12 are satisfied. In reaching a final decision on the Draft Permit, the EPA will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after any public hearings, if such hearings are held, the EPA will issue a Final Permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within 30 days following the notice of the Final Permit decision, any interested person may submit a petition for review of the permit to EPA's Environmental Appeals Board consistent with 40 C.F.R. § 124.19.

XIII. EPA and State Contacts

Additional information concerning the Draft Permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

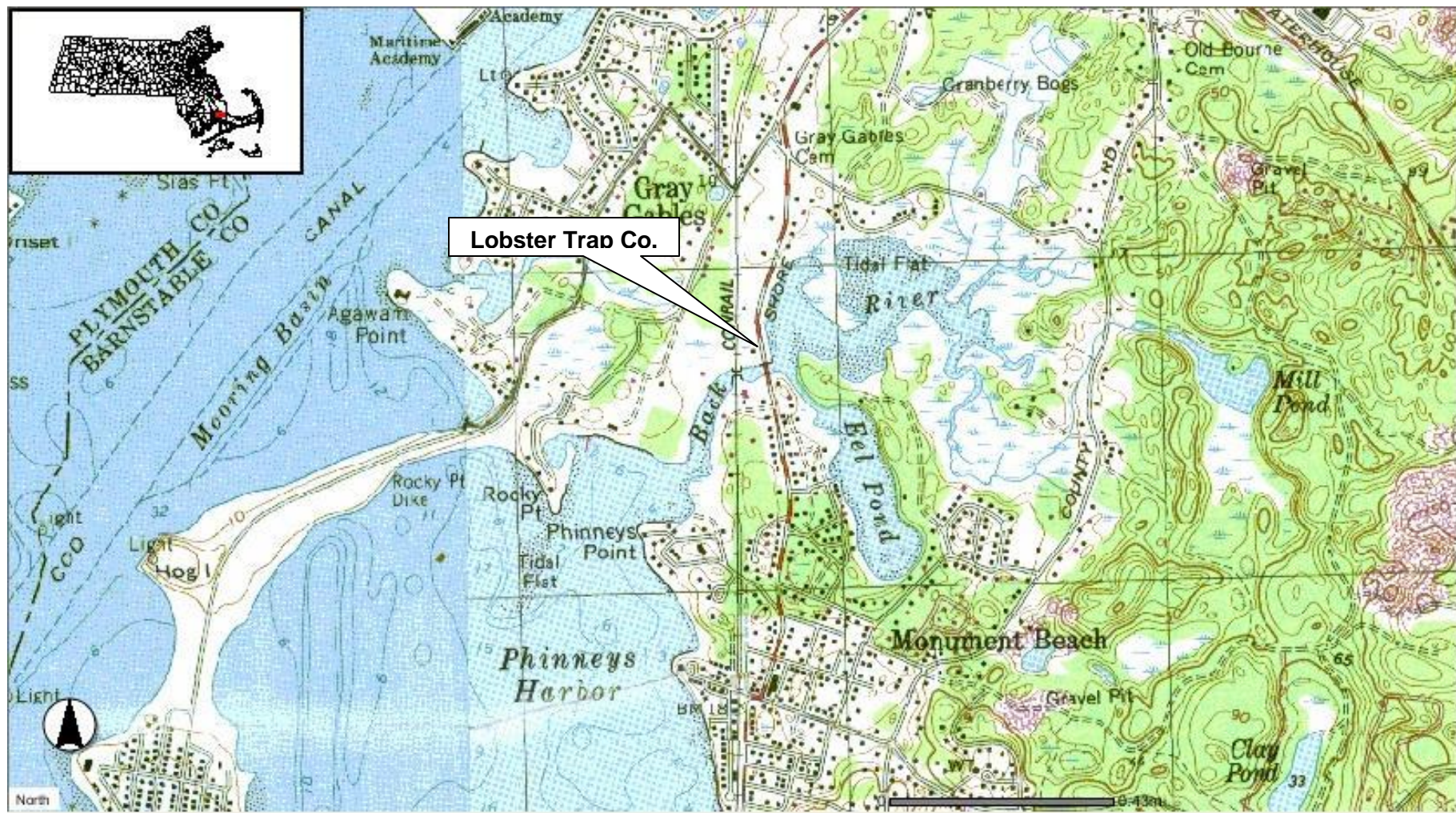
Danielle Gaito
EPA Office of Ecosystem Protection
5 Post Office Square, Suite 100 (OEP06-4)
Boston, MA 02109-3912
Tel: (617) 918-1297 Fax: (617) 918 -0297
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Cathy Vakalopolous
MassDEP Division of Watershed Management
1 Winter Street, 5th Floor
Boston, MA 02108
Tel: (617) 348-4026 Fax: (617) 292-5696
catherine.vakalopolous@state.ma.us

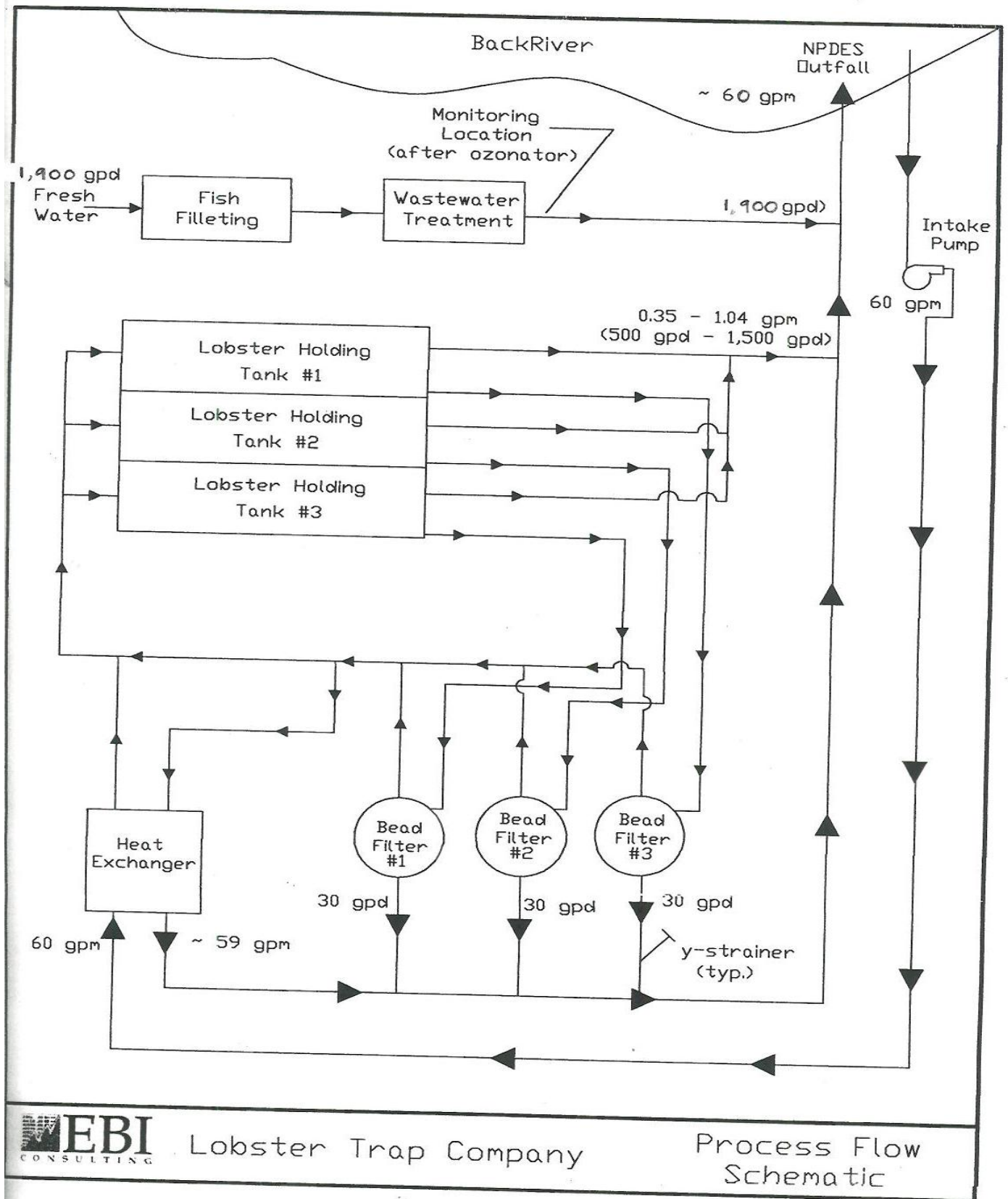
Date: _____

Stephen S. Perkins, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency

Attachment A. Location of Lobster Trap Company, Inc. Source: MassGIS USGS Topographic Maps.



Attachment B Flow Schematic



Attachment C
Discharge Monitoring Report Summary
July 2005 – June 2009

| | | Outfall 001 (Lobster Tanks) | Outfall 001 (Seafood Processing) | | | | | |
|------------------------|----------------------|------------------------------------|---|---------------|---------------|-----------------------|-------------------|-----------------------|
| | | Flow | Flow | BOD | TSS | pH¹ | Coliform | Oil&Grease |
| | | <i>gpd</i> | <i>gpd</i> | <i>lb/day</i> | <i>lb/day</i> | <i>s.u.</i> | <i>mpn/100 mL</i> | <i>lb/day</i> |
| Average Monthly | 2005 Permit Limit | Report | -- | 2.84 | 2.92 | 6.5 | 14 | 0.168 |
| | Minimum | 0.07 | -- | 0.01 | 0.01 | 6.31 | 1.00 | 0.01 |
| | Maximum | 84,960 | -- | 0.95 | 0.51 | 7.86 | 8.00 | 0.10 |
| | Average | 83,190 | -- | 0.05 | 0.05 | 7.25 | 1.65 | 0.02 |
| | Number of Violations | -- | -- | 0 | 0 | 1 | 0 | 0 |
| Maximum Daily | 2005 Permit Limit | Report | 3,500 | 6.00 | 7.5 | 8.5 | 28 | 0.384 |
| | Minimum | 0.07 | 544 | 0.01 | 0.01 | 7.17 | 1.00 | 0.01 |
| | Maximum | 84,960 | 6,088 | 2.75 | 1.43 | 8.67 | 8.00 | 0.27 |
| | Average | 84,960 | 1,920 | 0.10 | 0.09 | 7.79 | 1.65 | 0.03 |
| | Number of Violations | -- | 5 | 0 | 0 | 2 | 0 | 0 |

¹ The permittee reports the minimum and maximum pH for each monitoring period.

Attachment D
Effluent Limit Calculations

Technology-based Numeric Limits

Numeric limits in Draft Permit are based on the effluent limitations guidelines (ELGs) for New Sources in the Canned and Processed Seafood Category Subpart U: Non-Alaskan Conventional Bottom Fish Processing Subcategory at 40 CFR § 408.215.

| | Per 1,000 pounds of fish | |
|------------------|--------------------------|-----------------|
| | Maximum Daily | Average Monthly |
| BOD ₅ | 1.2 | 0.71 |
| TSS | 1.5 | 0.73 |
| Oil & Grease | 0.077 | 0.042 |

Annual Production at LTC (based on 2009 permit application):

Average monthly production = 4,500 lbs/day; Maximum daily production = 5,500 lbs/day

Average Monthly Limits:

BOD₅ = 0.71 per 1,000 pounds of fish x 4.5 thousand lbs/day = **3.20 lbs/day**

TSS = 0.73 per 1,000 pounds of fish x 4.5 thousand lbs/day = **3.29 lbs/day**

Oil & Grease = 0.042 per 1,000 pounds of fish x 4.5 thousand lbs/day = **0.19 lbs/day**

Maximum Daily Limits:

BOD₅ = 1.2 per 1,000 pounds of fish x 5.5 thousand lbs/day = **6.60 lbs/day**

TSS = 1.5 per 1,000 pounds of fish x 5.5 thousand lbs/day = **8.25 lbs/day**

Oil & Grease = 0.077 per 1,000 pounds of fish x 5.5 thousand lbs/day = **0.42 lbs/day**

RESPONSE TO PUBLIC COMMENTS
The Lobster Trap Company

National Pollutant Discharge Elimination System (NPDES) Permit No. MA0029092

The U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) are issuing a final National Pollutant Discharge Elimination System (NPDES) permit for the Lobster Trap Company (LTC), in Bourne, Massachusetts. The Final Permit authorizes LTC to discharge wastewater to the Back River, in accordance with the requirements of the Federal Clean Water Act (CWA), 33 U.S.C. §§ 1251 *et seq.*, and the Massachusetts Clean Waters Act, M.G.L. Ch. 21, §26-53.

The Draft Permit public comment period began on April 18, 2011, and ended on May 17, 2011. One comment was received from Kerri Driscoll, Esq., Advocacy Specialist, The Coalition for Buzzards Bay in a letter dated: May 17, 2011.

Comment, Response, and Summary of Changes from Draft Permit

The Final Permit is substantially identical to the Draft Permit that was available for public comment. Although EPA's decision-making process has benefitted from the comment and additional information submitted, the information and arguments presented did not raise any substantial new questions concerning the Final Permit. However, a few improvements and changes are detailed in this document and reflected in the Final Permit. A summary of the changes made in the Final Permit is listed below. The analyses underlying these changes are explained in the response to the comment that follows.

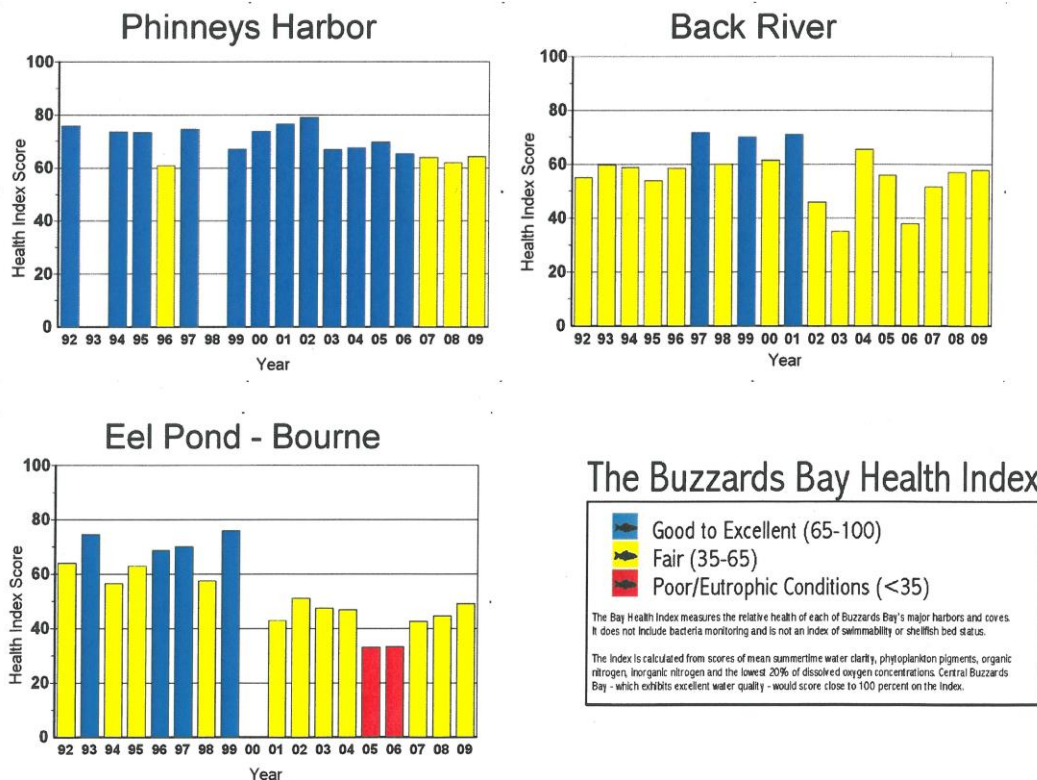
- 1) Part I.A.1. of the Final Permit requires the permittee to monitor total nitrogen from the influent and the combined discharge (lobster tank recirculation and seafood processing stream) prior to mixing with the receiving water a monthly basis. Part I.A.2. of the Final Permit requires the permittee to monitor total nitrogen from the treated effluent from fish processing prior to mixing with the lobster tank waste stream and/or the receiving water on a monthly basis.
- 2) The Final Permit includes a provision that the permittee may, based on a review and evaluation of at least two years of data, seek a reduction in nitrogen monitoring. Written approval by EPA and MassDEP is required prior to any reduction in the nitrogen monitoring frequency. This provision has been added to the Final Permit as Part I.A.12. Sections identified in the Draft Permit as Part I.A.12., Part I.A.13. and Part I.A.14., have been renumbered as Part I.A.13., Part I.A.14. and Part I.A.15., respectively.
- 3) Part I.B.5. of the Final Permit (Best Management Practices) requires the permittee to identify the sources of nitrogen and quantify nitrogen loading from the seafood processing operation effluent two years after the effective date of the permit.

Comment from The Coalition for Buzzards Bay:

The Phinney's Harbor Embayment System is covered by an EPA approved Total Maximum Daily Load ("TMDL") for total nitrogen. Since process wastewater from seafood processing facilities contains nitrogen (primarily in the form of ammonia), total nitrogen in the discharge from LTC should be monitored, reported, and limited through the LTC NPDES permit to ensure compliance with the TMDL.

The LTC facility is located on the Back River, which, along with Eel Pond, is part of the Phinney's Harbor System. The Phinney's Harbor System consists of a relatively well-flushed semi-enclosed outer harbor region, Phinney's Harbor, and a bifurcated tributary embayment, Back River and Eel Pond. All of the tidal exchanges to the tributary enclosed embayments are via the inlet to the Back River. This makes the Back River and Eel Pond the least well flushed portions of the system. These subembayments also receive most of the nitrogen entering from the Phinney's Harbor watershed.

Since 1992, The Coalition has been collecting nutrient related water quality data for the Phinney's Harbor embayment system. This data is used to determine a Bay Health Index score, which is calculated from scores of mean summertime water clarity, phytoplankton pigments, organic nitrogen, and the lowest 20% of dissolved oxygen concentrations. Central Buzzards Bay, which exhibits excellent water quality, would score close to 100 on the Bay Health Index. The scores for Phinney's Harbor embayment system, in the graphs below, indicate the system is degraded.



The Phinney's Harbor Embayment Total Maximum Daily Load ("TMDL") for Total Nitrogen was issued in November of 2007. The TMDL clearly states that "the present N loadings to Phinney's Harbor embayment system must be reduced in order to restore conditions and to avoid further nutrient-related adverse environmental impacts." (TMDL at [page] 13)

The draft NPDES permit is insufficient as it does not include a nitrogen discharge limit, monitoring or reporting requirements. The discharge from the LTC must comply with the total nitrogen limits established in the TMDL for the Phinney's Harbor Embayment System and EPA must demonstrate how compliance by the facility is being achieved.

Response:

On November 26, 2007, the Massachusetts Department of Environmental Protection (MassDEP) released the Final Phinney's Harbor Embayment System Total Maximum Daily Loads for Total Nitrogen (95-TMDL-2 CN#247.0). According to the TMDL, Phinney's Harbor embayment system is impaired due to excess nutrients, loss of eelgrass, low dissolved oxygen (DO) levels, elevated chlorophyll-a levels, and benthic faunal habitat degradation. The TMDL is based on achieving a target total nitrogen (N) concentration at the sentinel station that will restore and protect eelgrass in Phinney's Harbor. Where a TMDL exists for a receiving water body, the permitting authority must determine whether a WLA has been assigned to a point source seeking an NPDES permit. If a WLA has been so assigned, the permit issuer must calculate a water quality-based effluent limit for the pollutant that is "consistent with the assumptions and requirements of any available wasteload allocation for the discharge." 40 C.F.R. § 122.44(d)(1)(vii)(B). The Phinney's Harbor Embayment TMDL did not, however, assign the Lobster Trap Company's discharge to the WLA.¹ Thus, there is not an available WLA for the discharge. The TMDL also does not otherwise specify whether reductions from this specific source of nitrogen would be necessary.²

The absence of a WLA for the discharge does not resolve the question of whether a water quality-based effluent limitation for nitrogen must be imposed in the permit. Section 301(b)(1)(C) of the Clean Water Act mandates inclusion of "any more stringent limitation, including those necessary to meet water quality standards" in NPDES permits. EPA's

¹ Under the regulatory definition of WLA and EPA's longstanding interpretation, point sources that discharge pollutants to waters of the United States and are subject to the jurisdiction of the NPDES permit program are assigned to the WLA. Such an assignment was not made in the Phinney's Harbor TMDL, apparently the result of an oversight.

² Neither the Final TMDL Report nor the Massachusetts Estuaries Project (MEP) modeling report identifies point source discharges (such as LTC) as a primary source of nitrogen to the embayment system (TMDL 15). According to the watershed model developed by the MEP, septic systems are the largest contributor of N loading in the embayment (nearly 42%), followed by sediments (32%). Howes, B., S. W. Kelley, J. S. Ramsey, R. Samimy, D. Schlezinger, E. Eichner. 2006. Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the Phinneys Harbor – Eel Pond – Back River System, Bourne, Massachusetts. Massachusetts Estuaries Project, Massachusetts Department of Environmental Protection. Boston, MA. According to MassDEP's TMDL, the primary goal of implementation of this TMDL will be lowering concentrations of N by greatly reducing loadings from on-site subsurface wastewater disposal (septic) systems through a variety of methods such as sewerage and treatment with nitrogen removal technology, advanced treatment of septage, and/or installation of nitrogen-reducing on-site systems.

regulations set out the process for the Region to determine whether permit limits are “necessary” to achieve state water quality standards and for the formulation of these requirements. *See* 40 C.F.R. § 122.44(d). Permit writers are first required to determine whether pollutants “are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion” of the narrative or numeric criteria set forth in state water quality standards. *Id.* § 122.44(d)(1)(i). If a discharge is found to cause, have the reasonable potential to cause, or contribute to an excursion of a state water quality criterion, then a permit must contain effluent limits as stringent as necessary to achieve state water quality standards. 40 C.F.R. § 122.44(d)(1), (5).

In determining whether reasonable potential exists for the discharge to cause or contribute to a water quality standards violation, EPA has considered the TMDL Final Report, as well as other data in the administrative record for the permit. LTC discharges to the Back River. According to the TMDL and MEP report, the Back River and Eel Pond are not impaired for N. However, a “pollution prevention” TMDL is needed for both inner basins since these embayments are “linked to the larger embayment system and any future impairment of these two segments could further contribute to the impairment of the segments at issue in this TMDL” (TMDL at 19). A pollution prevention TMDL will encourage the maintenance and protection of existing water quality and help prevent further degradation to waterbodies that are downstream or linked. A total N TMDL of 12 kg/day was identified for all sources in the Back River, which would include any contribution from LTC.

At this time, EPA cannot accurately quantify the contribution of total N from LTC to the Phinney’s Harbor embayment system or project the instream concentration resulting from the discharge because total N in the influent and effluent from the facility has not been monitored to date. In preparation of the permit application, LTC collected one sample for total ammonia (as N) from the seafood processing waste stream and one sample from the lobster holding tank waste stream. The concentration of ammonia in the seafood processing effluent was less than 0.5 mg/l, and the concentration was 0.08 mg/l in the lobster tank effluent. Prior to discharge, the effluent from fish processing is filtered and solids removed and disposed of offsite, which may help to reduce levels of ammonia in the effluent. At these concentrations and maximum permitted flows, the total load of ammonia nitrogen to the Back River is estimated to be 0.007 kilograms per day (kg/d) from the seafood processing wastestream and 0.026 kg/day from the lobster tanks (see calculation below). EPA expects that the contribution of total N from the effluent at LTC (estimated to be less than 0.035 kg/d) is within the target threshold N load for the Back River (12 kg/d) identified in the TMDL. Given that the Back River currently supports healthy infaunal habitat, and the N levels in the effluent appear to be relatively low, EPA does not now conclude that the LTC has the reasonable potential to cause or contribute to nutrient enrichment, but that monitoring and reporting the concentration of total N is appropriate at this time.

$$\text{Load (lbs/d)} = \text{Flow (MGD)} \times \text{Concentration (mg/l)} \times 8.34 \text{ (conversion factor)}$$

Seafood Processing Wastestream:

$$\text{Ammonia N Load} = (0.0035 \text{ MGD}) \times (0.5 \text{ mg/l}) \times 8.34 = 0.015 \text{ lb/d} \times (0.45 \text{ kg/lb}) = \mathbf{0.007 \text{ kg/d}}$$

Lobster Tank Wastestream:

$$\text{Ammonia N Load} = (0.0864 \text{ MGD}) \times (0.08 \text{ mg/l}) \times 8.34 = 0.058 \text{ lb/d} \times (0.45 \text{ kg/lb}) = \mathbf{0.026 \text{ kg/d}}$$

Total Ammonia N Load:

$$\text{Total Ammonia N Load} = \text{Seafood Processing Load} + \text{Lobster Tank Load}$$

$$\text{Total Ammonia N Load} = 0.007 \text{ kg/day} + 0.026 \text{ kg/day} = \mathbf{0.033 \text{ kg/d}}$$

In response to the comment from The Coalition for Buzzards Bay, the Final Permit requires the permittee to monitor total N from the influent, the effluent at Outfall 001, and the seafood processing stream prior to mixing with any other waters on a monthly basis. Collection of these data each month will provide EPA with sufficient information to quantify the N levels in that section of the Back River (influent sample) as well as determine the N load from the effluent. This monitoring will confirm that the facility discharge is consistent with the recommendations of the TMDL. This condition has been added to Parts I.A.1 and I.A.2 of the Final Permit.

In addition, Part I.B.5. of the Final Permit (Best Management Practices) requires the permittee to identify the sources of N and quantify N loading from the seafood processing operation effluent within two years of the effective date of the permit. This study will help identify the potential for this facility to contribute N to the embayment system and potential strategies to reduce the N load from seafood processing operation in the future, should it be necessary. The Final Permit also includes a provision that the permittee may, based on a review and evaluation of at least two years of data, seek a reduction in N monitoring. Written approval by EPA and MassDEP is required prior to any reduction in the N monitoring frequency. This provision has been added to the Final Permit as Part I.A.12. Sections identified in the Draft Permit as Part I.A.12., Part I.A.13. and Part I.A.14., have been renumbered as Part I.A.13., Part I.A.14. and Part I.A.15., respectively.

EPA disagrees with the comment that the Back River and Eel Pond receive most of the N entering from the Phinney's Harbor watershed. According to Table 3 in the TMDL, the present total N load from land use and septic systems is greatest for Phinneys Harbor (14.75 kg/day). The total N load to the Back River and Eel Pond from these two sources is estimated at 9.67 kg/day and 4.88 kg/day, respectively. The TMDL states "most of the N loading is focused on the outer basin of the Harbor, as is the impairment. It is the outer basin which is capable of supporting eelgrass and which presently contains little eelgrass habitat. In contrast, the inner two basins are either naturally nutrient (and organic matter) enriched such as the Back River salt marsh, or are depositional basins not supportive of eelgrass yet supportive of infaunal habitat

which was found to be relatively healthy. The result is a system with relatively healthy inner basins and an impaired outer basin” (TMDL 5).

The comment also indicates that the Phinney’s Harbor embayment system is degraded because the Bay Health Index scores (based on nutrient related water quality data) of the three basins are less than 100 (a score equivalent to excellent water quality). According to the Coalition for Buzzards Bay, the Bay Health Index score is calculated from nutrient-related water quality parameters and is an approximate gauge of the health of an embayment. In many cases, elevated chlorophyll and nutrient levels and depleted dissolved oxygen would indicate poor water quality and possible habitat degradation. However, some systems may have naturally high levels of nutrients and low dissolved oxygen not related to poor water quality or habitat. In the case of a tidal salt marsh like the Back River, water quality parameters likely exhibit nutrient and organic matter enrichment due to natural sources. According to the TMDL, the Back River exhibits good to fair conditions for eelgrass loss, chlorophyll-a, dissolved oxygen, and benthic fauna (i.e., little or no change from normal conditions).

Each of the three basins has different natural sensitivities to N enrichment and organic matter loading. N concentrations in the inner basins (Back River and Eel Pond) are naturally higher than in the outer basin. According to the Massachusetts Estuaries Project (MEP) report (see footnote 2), “both inner basins showed greater nitrogen enrichment and subsequent oxygen depletions and chlorophyll levels, different than for the outer basin of Phinneys Harbor. However, the cause of these conditions appears to stem primarily from the naturally organic enriched nature of salt marshes (Back River) and the structure of the drowned kettle pond, Eel Pond” (MEP 99). The MEP report found that removal of anthropogenic nitrogen inputs to Eel Pond in the Linked Watershed- Embayment Model did little to lower water column nitrogen levels and determined that the enrichment of N and phytoplankton in Eel Pond is a natural condition consistent with the absence of eelgrass in the 1951 survey and relatively healthy infaunal habitat (MEP 99). Similarly, the MEP report indicated that greater oxygen depletions but lower chlorophyll-a levels in the Back River compared to Phinneys Harbor are related to its function as a tidal salt marsh sub-basin, where organic matter enriched sediments support high levels of oxygen uptake at night and deplete the overlying waters, and near complete exchange of tidal waters prevents a significant build-up of phytoplankton biomass. The report determined that oxygen depletion in the Back River is consistent with the organically enriched nature of smaller salt marsh creeks (MEP 99). The fact that the water quality in the Back River, where LTC is located, is consistent with its function as a tidal salt marsh sub-basin suggests to EPA that the basin is not presently degraded.