

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)

Hollingsworth and Vose Company

is authorized to discharge from the facility located at

**112 Washington Street
East Walpole, MA 02032**

to receiving water named

Neponset River - MA73-01

a Class B water, in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit will become effective upon signature.

This permit supersedes the permit issued on April 18, 2003.

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 consists of 8 pages in Part I including effluent limitations and monitoring requirements, and 25 pages in Part II including Standard Conditions.

Signed this 9th day of September, 2011

/S/SIGNATURE ON FILE

Stephen S. Perkins, Director
Office of Ecosystem Protection
Environmental Protection Agency
Region I
Boston, MA

David Ferris, Director
Massachusetts Wastewater Management 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 filter backwash water from **Outfall Serial Number 002** to the Neponset River. Such discharge shall be limited and monitored by the permittee as specified below.

| Effluent Characteristic | Units | Discharge Limitation | | Monitoring Requirements | |
|------------------------------|-------|----------------------|---------------|-------------------------|-------------|
| | | Average Monthly | Maximum Daily | Measurement Frequency | Sample Type |
| Flow | gpd | 4,000 | Report | Daily | Estimate |
| Total Suspended Solids (TSS) | mg/l | 20 | 30 | 1/Month | Grab |
| pH range ^{1, 2} | S.U. | 6.5 - 8.3 | | 1/Month | Grab |

See footnotes on page 3

Sampling for effluent parameters shall be conducted at the strainer's overflow tank after treatment and before it reaches the Neponset River.

Footnotes for Parts I.A.1:

1. The pH of the effluent shall not be less than 6.5 standard units (SU), nor greater than 8.3 SU at any time, unless these values are exceeded due to natural causes. The pH shall be no more than 0.5 units outside the natural background range. To demonstrate that pH values of the effluent are outside the permitted pH range due to natural causes, the permittee must show that pH measurements of the source water and the effluent are the same. When the values are exceeded due to natural causes, documentation of such conditions must be submitted by the permittee with the monthly DMR.
2. Required for State Certification.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

2. The discharge shall not cause a violation of the water quality standards of the receiving waters.
3. The discharge shall not cause objectionable discoloration to the receiving waters.
4. The discharge shall not contain a visible oil sheen, foam, or floating solids at any time.
5. The effluent shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.
6. The discharges shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.
7. If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the Clean Water Act (CWA).
8. All existing manufacturing, commercial, mining and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR § 122.42):
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine 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) 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 Director in accordance with 40 CFR § 122.44(f).
 - 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) Five hundred micrograms per liter (500 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 C.F.R.§122.21(g)(7);
 - (4) Any other notification level established by the Director in accordance with 40 C.F.R.§122.44(f).
- c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
9. Toxics Control
- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
 - b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal 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.

B. UNAUTHORIZED DISCHARGES

- 1. 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 of this permit. Discharges of wastewater from any other point sources not authorized by this permit or other NPDES permits shall be reported in accordance with Part II (Standard Conditions), Section D.1.e.(1) of this permit (Twenty-four hour reporting).

C. REOPENER CLAUSES

- 1. This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable standard or limitation promulgated or approved under sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the CWA, if the effluent standard or limitation so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - b. Controls any pollutants not limited in the permit.

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 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 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. All reports required under this permit 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 address:

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

Duplicate signed copies of all reports or notifications required above, with the exception of DMRs, shall be submitted to the State at the following address:

**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.

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 MassDEP pursuant to the Massachusetts Clean Waters Act, MGL c. 21, §§ 26-53, and 314 CMR 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 CFR 124.53, MGL 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: MA0004570

PUBLIC NOTICE START AND END DATES: July 14, 2011 – August 13, 2011

NAME AND MAILING ADDRESS OF APPLICANT:

Hollingsworth and Vose Company
112 Washington Street
East Walpole, MA 02032

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Hollingsworth and Vose Company
112 Washington Street
East Walpole, MA 02032

RECEIVING WATER: Neponset River – MA73-01

RECEIVING WATER CLASSIFICATION: B

SIC CODE: 2621

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

The above applicant has applied to the U.S. Environmental Protection Agency (EPA) for re-issuance of a National Pollutant Discharge Elimination System (NPDES) permit to discharge contact and non-contact cooling water into the Neponset River (the designated receiving water). The current permit ("2003 permit") was issued on April 18, 2003, became effective on June 17, 2003, and expired September 30, 2006. EPA received a completed permit renewal application from the facility dated March 13, 2006. Since the permit renewal application was deemed timely and complete by EPA, the permit has been administratively continued pursuant to 40 CRF § 122.6.

The Hollingsworth and Vose (H&V) East Walpole facility is engaged in the manufacture of specialty paper (gasketing papers). In H&V's basic papermaking process, natural and synthetic fibers and fillers are dispersed in water and paper making chemicals (latex chemicals) are added. The stock is then spread out on to a conventional paper machine. Vulcanization (cross linking) is performed to give fluid and heat resistance and physical strength to gasketing papers. Zinc is needed as an activator of vulcanization, and it is used in the form of several different compounds. Process water is withdrawn from the Neponset River and is covered under the Water Management Act (WMA) registration number 41930702.

The facility is located at Latitude 42° 10' 00" Longitude 71° 12' 45". An aerial view of the facility, Outfall 002 and the Neponset River is shown in Attachment A.

2. Description of Discharge

The 2003 permit authorized two discharges from this site (Outfall 002 and Outfall 003). Outfall 002 is comprised of backwash from a strainer which is used intermittently to filter river water to be used in the manufacturing process. It is only used when the river water is determined to be of undesirable clarity to meet specific job requirements. The 2003 permit authorized an average flow of 4000 gallons per day from this outfall.

Outfall 003, which was initially authorized in the 1995 permit to discharge treated process water from the paper making operation, has never been utilized. The 2003 permit authorized the discharge of an average flow of 700,000 gallons per day.

Storm water discharges from this site are authorized under the Storm Water Multi-Sector General Permit for Industrial Activities (MSGP) with tracking number MAR05CV91, and so are not addressed in this permit.

Discharge monitoring data from January 31, 2006 through December 31, 2010 for Outfalls 002 and 003 was collected under the terms of the 2003 permit. The facility did not discharge during that time period and the only data reported were pH (8.0 Standard units) and Temperature (73.8°F) from August 2007. No permit limits were violated.

3. Receiving Water Description

The facility is authorized to discharge through Outfall 002 and Outfall 003 to the Neponset River (segment MA73-01). This segment spans from the outlet of the Neponset Reservoir, Foxborough to the confluence with East Branch, Canton and drains into the Boston Harbor. The

Neponset River is classified as Class B (warm water fishery)¹, by the Massachusetts Department of Environmental Protection (MassDEP) under the Commonwealth of Massachusetts Water Quality Standards². Class B waters are described in the Commonwealth of Massachusetts Water Quality Standards (314 CMR 4.05(3)(b)) as “designated as a habitat for fish, other aquatic life, and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation. Where designated in 314 CMR 4.06, they shall be suitable as a source of public water supply with appropriate treatment (“Treated Water Supply”). Class B waters shall be suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses. These waters shall have consistently good aesthetic value.”

The regulation at 314 CMR 4.05(3)(b) states that dissolved oxygen and temperature criteria apply in Class B warm water fisheries. Therefore, temperature shall not exceed 83°F (28.3°C), the rise in temperature shall not exceed 5°F (2.8°C), and dissolved oxygen (DO) shall not be less than 5.0 mg/l. Where natural background conditions are lower, DO shall not be less than natural background conditions. Natural seasonal and daily variations that are necessary to protect existing and designated uses shall be maintained.

Section 303 (d) of the Clean Water Act (CWA) requires states to identify those water bodies that are not expected to meet water quality standards after the implementation of technology based controls and, as such, require the development of total maximum daily loads (TMDL). This segment of the Neponset River is listed on the *Final Massachusetts Year 2008 Integrated List of Waters*³ as a Category 5 waterbody (Waters Requiring a TMDL) and is listed as impaired for metals, nutrients, siltation, organic enrichment/low DO, pathogens, suspended solids, noxious aquatic plants, and turbidity.

4. Limitations and Conditions

The proposed effluent limitations and monitoring requirements may be found in the draft NPDES permit.

5. Permit Basis: Statutory and Regulatory Authority

The CWA prohibits the discharge of pollutants to waters of the United States without a National Pollutant Discharge Elimination System (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. The draft NPDES permit was developed in accordance with various statutory and regulatory requirements established pursuant to the CWA and applicable State regulations. The regulations governing the EPA NPDES permit program are generally found at 40 CFR Parts 122, 124, 125, and 136. In this permit EPA considered (a) technology-based requirements, (b) water quality-based requirements, and (c) all limitations and requirements in the current/existing permit, when developing the permit limits.

5.1 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

¹ <http://www.mass.gov/dep/water/laws/tblfig.pdf>

² <http://www.mass.gov/dep/service/regulations/314cmr04.pdf>

³ <http://www.mass.gov/dep/water/resources/08list2.pdf>

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 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 available (BAT) for toxic and non-conventional pollutants. In general, technology-based effluent guidelines for non-POTW facilities must have been 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 cannot be authorized by a NPDES permit.

The facility falls within the Pulp, Paper Paperboard Point Source Category, and as such, is regulated under the effluent guidelines found at 40 CFR Part 430. None of the guidelines found in this part are directly applicable to the H&V facility because, as indicated above, the facility is engaged in the manufacture of specialty paper (gasketing papers) only. Furthermore, as discussed in section 6.1 below, the authorization to discharge treated process water from Outfall 003 is being discontinued in the draft permit. Discharge of filter backwash water from Outfall 002 will continue to be authorized, but none of the guidelines in Part 430 are directly applicable to this discharge.

In the absence of published technology-based effluent guidelines, the permit writer is authorized under Section 402(a)(1)(B) of the CWA to establish effluent limitations on a case-by-case basis using best professional judgment (BPJ).

5.2 Water Quality-Based Requirements

Section 301(b)(1)(C) of the CWA requires that effluent limitations based on water quality considerations be established for point source discharges when such limitations are necessary to meet state or federal water quality standards that are applicable to the designated receiving water. This is necessary when technology-based limitations would interfere with the attainment or maintenance of water quality in the receiving water.

Under Section 301(b)(1)(C) of the CWA and EPA regulations, NPDES permits must contain effluent limits more stringent than technology-based limits where more stringent limits are necessary to maintain or achieve state or federal water quality standards.

Water quality standards consist of three 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); and (3) anti-degradation requirements to ensure that once a use is attained it will not be degraded. The Massachusetts Surface Water Quality Standards, found at 314 CMR 4.00, include these elements. The state will limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained 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, shall be used unless a site specific criterion is established.

The draft permit must limit any pollutant or pollutant parameter (conventional, non-conventional, and toxic) that is or may be discharged at a level that causes or has the "reasonable potential" to cause or contribute to an excursion above any water quality standard (40 CFR § 122.44(d)). An excursion occurs if the projected or actual in-stream concentration exceeds an applicable water quality criterion. In determining "reasonable potential", EPA considers: (1) existing controls on point and non-point sources of pollution; (2) pollutant concentration and variability in the effluent and receiving water as determined from the permit's re-issuance application, monthly discharge monitoring reports (DMRs), and State and Federal Water Quality Reports; (3) sensitivity of the indicator species used in toxicity testing; (4) known water quality impacts of processes on waste waters; and (5) where appropriate, dilution of the effluent in the receiving water.

5.3 *Anti-Backsliding*

A permit may not be renewed, reissued or modified with less stringent limitations or conditions than those contained in the previous permit unless in compliance with the anti-backsliding requirements of the CWA [see Sections 402(o) and 303(d)(4) of the CWA and 40 CFR §122.44(l)(1 and 2)]. EPA's antibacksliding provisions prohibit the relaxation of permit limits, standards, and conditions except under certain circumstances. The limits in this draft permit are identical to those in the 2003 permit (for Outfall 002) and are, therefore, in accordance with anti-backsliding requirements.

5.4 *Anti-Degradation*

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 Commonwealth of Massachusetts' anti-degradation provisions found in 314 CMR § 4.04 ensure that provisions in 40 CFR § 131.12 are met. The effluent limits in the draft permit should ensure that provisions in 314 CMR § 4.04 are met. The State is also asked to certify that the anti-degradation provisions in State law are met.

6. Explanation of the Permit's Effluent Limitations and Derivations

6.1 *Facility Information*

H&V's facility (the "facility") is located in East Walpole, MA along the Neponset River, approximately 1 mile west of Interstate 95, on the east side of Washington Street. As previously noted, H&V falls within the Pulp, Paper Paperboard Point Source Category, and as such, is regulated under the effluent guidelines found at 40 CFR Part 430.

Outfall 002

Outfall 002 is comprised of backwash from a strainer which is used intermittently to filter river water to be used in the manufacturing process. It is only used when the river water is determined to be of undesirable clarity to meet specific production requirements. The 2003 permit authorized an average flow of 4000 gallons per day from this outfall.

Outfall 003

Outfall 003 was authorized for the discharge of treated process water from the paper making operation. The 1995 NPDES permit first authorized the discharge of an average flow of 700,000

gallons per day directly to the Neponset River from Outfall 003. In order to achieve the effluent limitations in the permit, the permittee was planning to upgrade its existing pretreatment facility prior to initiating the direct discharge. However, the permittee did not upgrade its pretreatment facility and did not discharge through Outfall 003, due to a decline in business which made construction of the wastewater treatment facility economically infeasible. The facility discharges process and sanitary water to the Massachusetts Water Resources Authority (MWRA).

In this permit reissuance, EPA has decided to remove the authorization to discharge from Outfall 003. Should the permittee desire to discharge from Outfall 003 in the future, it must submit an application for a permit modification to this Agency at least 180 days in advance of the proposed discharge [(See 40 CFR §122.21(c)(1)]. In addition, this proposed discharge would also have to undergo an antidegradation review by the MassDEP prior to its approval.

The facility must provide written notification to EPA and MassDEP of any changes in the operations at the facility that may have an effect on the permitted discharge of wastewater from the facility.

6.2 Derivation of Effluent Limits under the Federal CWA and/or the Commonwealth of Massachusetts' Water Quality Standards

The draft permit authorizes the discharge from Outfall 002 of backwash from a strainer which is used intermittently to filter river water used in the manufacturing process, subject to effluent limitations which are within applicable water quality standards. The effluent parameters in the draft permit are discussed in more detail below and the sections are arranged by the specific effluent parameter.

6.2.1 Available Dilution

Water quality-based effluent limitations are established based on a calculated dilution factor derived from the available dilution in the receiving water at the point of discharge. Massachusetts water quality standards require that the available effluent dilution be calculated based upon the 7Q10 flow of the receiving water (314 CMR 4.03(3)(a)). The 7Q10 flow is the mean low flow over seven consecutive days, occurring every ten years. Use of the 7Q10 flow allows for the calculation of the available dilution under critical flow (worst-case) conditions, which in turn results in the derivation of conservative water quality-based effluent limitations.

The dilution factor (DF) for the Hollingsworth and Vose discharge (Outfall 002), based on the permitted flow of 0.004 mgd and a 7Q10 flow of 2.12 MGD, is 531. The 7Q10 flow was obtained from the United States Geological Survey and was modified for drainage area accuracy. The dilution factor calculation is as follows:

$$DF = (\text{Discharge flow} + 7Q10 \text{ flow})/\text{discharge flow} = (0.004 + 2.12)/0.004 = \mathbf{531}$$

6.2.2 Flow

The 2003 permit average monthly effluent limit is 0.004 mgd for Outfall 002. EPA is not proposing any change to this requirement in this round of permitting.

6.2.3 Total Suspended Solids (TSS)

The draft permit contains limits of 20 mg/L, as a monthly average and 30 mg/L, as a daily maximum. These limits are the same as in the previous permit and are based on best professional judgment (BPJ). EPA believes that these limits are still appropriate and achievable and are consistent with State Water Quality Standards which require that waters be free from floating, suspended or settleable solids in concentrations that would impair any use assigned to this Class B water.

In order to comply with antibacksliding provisions (40 CFR §122.44(l)(1)), EPA is not proposing any change to the TSS limit for Outfall 002 in the draft permit.

6.2.4 pH

The Massachusetts Surface Water Quality Standards require that pH in a Class B water “shall be in the range of 6.5 through 8.3 standard units but not more than 0.5 units outside of the natural background range” (314 CMR 4.05(3)(b)3).

In order to comply with Massachusetts Surface Water Quality Standards and to comply with antibacksliding provisions (40 CFR §122.44(l)(1)), EPA is not proposing any change to the pH limit range or monitoring requirements for Outfall 002 in the draft permit.

7. 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 Service (NMFS) if EPA’s action or proposed actions that it funds, permits, or undertakes, “may adversely impact any essential fish habitat,” 16 U.S.C. § 1855(b). The Amendments broadly define “essential fish habitat” (EFH) as: “waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity,” 16 U.S.C. § 1802(10). “Adverse 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 fish 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.

Attachment B shows the designated EFH species believed to be present during one or more life stages within the facility’s EFH area. The EFH area encompasses Boston Harbor, into which the Neponset River discharges. No "habitat area of particular concern" as defined under Section 600.815(a)(9) of the Magnuson-Stevens Act, has been designated for this site. Although EFH has been designated for this general location, EPA has concluded that this activity is not likely to affect EFH or its associated species for the following reasons:

- The quantity of the discharge from the facility is at most 0.004 mgd;
- The dilution factor is high (531);
- Effluent limits protective of aquatic life have been established for TSS and pH;
- The permit prohibits any violation of state water quality standards.

EPA believes that the conditions and limitations contained within the draft permit adequately protect all aquatic life. Impacts associated with this facility to the EFH species, its habitat and forage, have been minimized to the extent that no significant adverse impacts are expected. Further mitigation is not warranted. Should adverse impacts to EFH be detected as a result of this permit action, or if new information is received that changes the basis for EPA's conclusions, NMFS will be contacted and an EFH consultation will be re-initiated.

8. 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. The National Marine Fisheries Service (NOAA Fisheries) administers Section 7 consultations for marine species and anadromous fish.

EPA has reviewed the federal endangered or threatened species of fish, wildlife, or plants to see if any such listed species might potentially be impacted by the re-issuance of this NPDES permit.

According to the USFWS listing of federally endangered and threatened species, dated June 22, 2009, there are **no species or critical habitats listed within Norfolk County**. According to the Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program list of rare species by Town⁴, no federally listed endangered or threatened species are known to occur in the vicinity of the discharge. Based on the normal distribution of these species, it is highly unlikely that they would be present in the vicinity of this discharge.

EPA believes the proposed limits are sufficiently stringent to assure that water quality standards will be met and to ensure protection of aquatic life and maintenance of the receiving water as an aquatic habitat. If adverse effects do occur as a result of this permit action, or if new information becomes available that changes the basis for this conclusion, then EPA will notify both the USFWS and the NOAA Fisheries and consultation will be promptly initiated. A copy of the draft permit has been provided to both USFWS and NOAA Fisheries for review and comment.

9. 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 monitoring program in the permit specifies routine sampling and analysis which will provide continuous information on the reliability and effectiveness of the installed pollution abatement equipment. The approved analytical procedures are to be found in 40 CFR 136 unless other procedures are explicitly required in the permit.

The draft permit includes new provisions related to Discharge Monitoring Report (DMR) submittals

⁴ http://www.mass.gov/dfwle/dfw/nhesp/species_info/town_lists/town_w.htm

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 CWA permittees to submit DMRs electronically via a secure Internet application to U.S. EPA through the Environmental Information Exchange Network. NetDMR allows 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” request process. Permittees who believe they cannot 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 must be postmarked no later than the 15th day of the month following the completed reporting period.

10. State Certification Requirements

Under CWA section 401(a)(1), EPA may not issue a permit unless the MassDEP either certifies that the effluent limitations contained in this permit are stringent enough to assure that the discharge will not cause the receiving water to violate State Water Quality Standards or waives its right to such a

certification. EPA has requested that MassDEP certify the permit. EPA expects that the permit will be certified. Regulations governing state certification are set forth in 40 CFR §§ 124.53 and 124.55.

11. 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 **Mr. Michael Cobb, U.S. Environmental Protection Agency, Region 1 (New England), 5 Post Office Square - Suite 100, Mail Code OEP06-1, Boston, MA 02109-3912**. 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 CFR § 124.19.

12. EPA and MassDEP Contacts

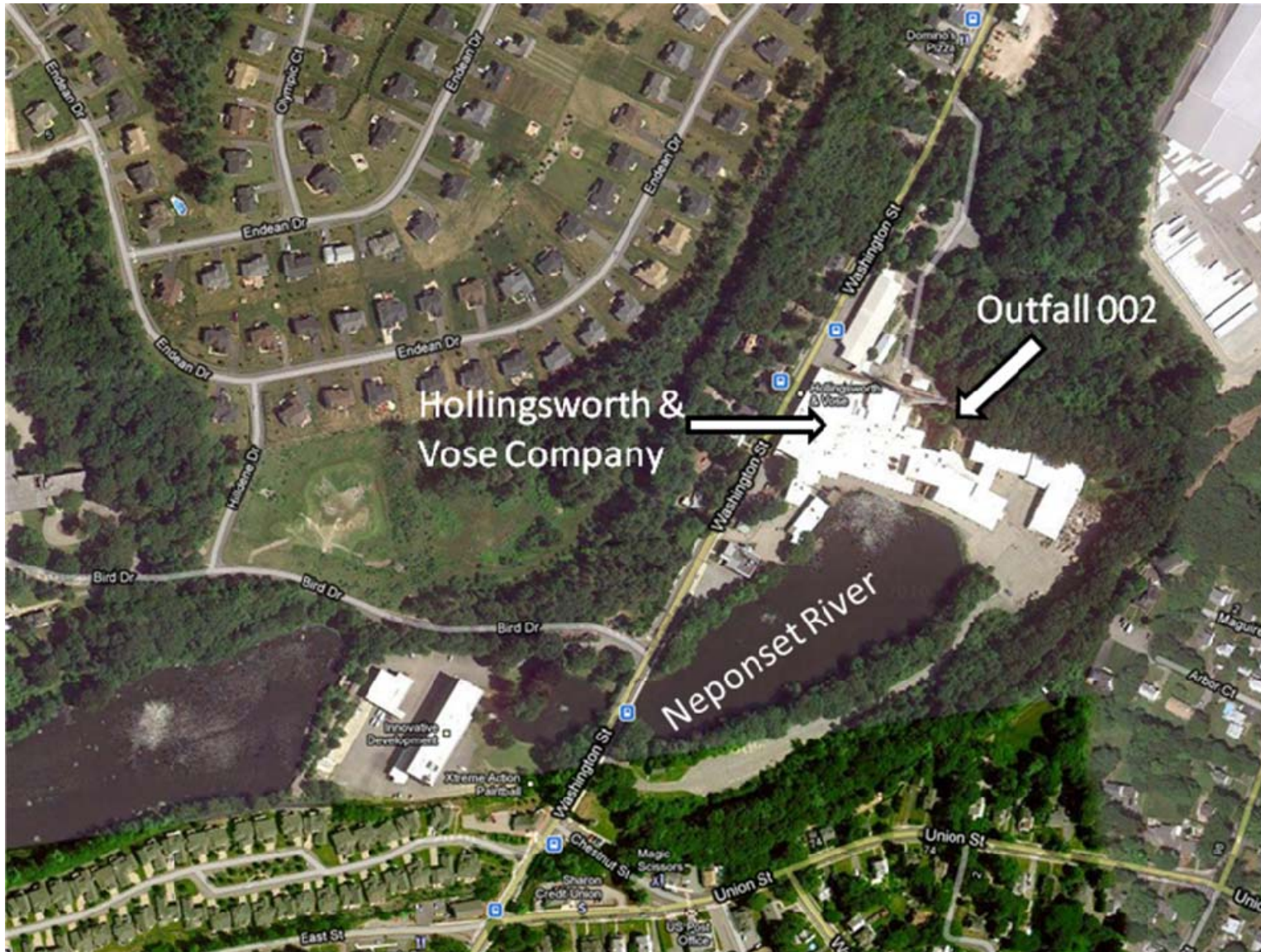
Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

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

Attachment A – Aerial View of Facility



Aerial image obtained from Google Maps (<http://maps.google.com>)

Attachment B – Summary of Essential Fish Habitat (EFH) Designation

| Species | Eggs | Larvae | Juvenile s | 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 | X |
| whiting (<i>Merluccius bilinearis</i>) | X | X | X | X |
| offshore hake (<i>Merluccius albidus</i>) | | | | |
| red hake (<i>Urophycis chuss</i>) | X | X | X | X |
| white hake (<i>Urophycis tenuis</i>) | X | X | X | X |
| redfish (<i>Sebastes fasciatus</i>) | n/a | | | |
| witch flounder (<i>Glyptocephalus cynoglossus</i>) | | | | |
| winter flounder (<i>Pseudopleuronectes americanus</i>) | X | X | X | X |
| yellowtail flounder (<i>Limanda ferruginea</i>) | X | X | X | X |
| windowpane flounder (<i>Scophthalmus 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>) | | | | |
| bluefish (<i>Pomatomus saltatrix</i>) | | | X | X |
| long finned squid (<i>Loligo pealeii</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>) | n/a | n/a | X | X |
| black sea bass (<i>Centropristis striata</i>) | n/a | | X | X |
| surf clam (<i>Spisula solidissima</i>) | n/a | n/a | X | X |
| ocean quahog (<i>Artica islandica</i>) | n/a | n/a | | |
| spiny dogfish (<i>Squalus acanthias</i>) | n/a | n/a | | |
| tilefish (<i>Lopholatilus chamaeleonticeps</i>) | | | | |
| bluefin tuna (<i>Thunnus thynnus</i>) | | | X | X |

*Table obtained NOAA's website (<http://www.nero.noaa.gov/hcd/index2a.htm>) with the following description: Waters within the Atlantic Ocean within the square within Massachusetts Bay and within Boston Harbor affecting South Boston, MA., on the north, south to Quincy MA., including waters east of Dorchester, MA., Squantum Point, Thompson Island (up to it's northwest tip), and within Dorchester Bay. Also affected are the Neponset River and Old Harbor.