

MAG 250872

rec'd 9/25/08
ofrawy**APPENDIX 5****Suggested Form for Notice of Intent (NOI) for the Noncontact Cooling Water General Permit****I. General facility information. Please provide the following information about the facility.**

a) Name of facility: Hazen Paper Company		Type of Business: Paper Converters
Facility Location Address :	Facility SIC codes: 2672	Facility Mailing Address (if not location address) P.O. Box 189 Holyoke, Ma. 01040
longitude: 072 36 28 latitude: 42 11 37		
b) Name of facility owner: John Hazen		Email address of owner: jhh@hazen.com
Owner's Tel #: 413-538-8204 Owner's Fax #: 413-533-1420	Owner is (check one): 1. Federal _____ 2. State _____ 3. Tribal _____ 4. Private <u>X</u> 4. Other _____ (Describe)	
Address of owner (if different from facility address)		
Legal name of Operator, if not owner: _____ Operator Contact Name: _____ Operator Tel Number: _____ Fax Number: _____ Operator's email: _____ Operator Address (if different from owner) _____		
d) Attach topographic map indicating the locations of the facility and the receiving water; all NCCW discharge points; upstream and downstream monitoring points. Map attached? <u>Yes</u>		
e) Check Yes or No for the following: 1. Has a prior NPDES permit been granted for the discharge? Yes <u>X</u> No _____ If Yes, Permit Number: <u>MAC250600</u> 2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes _____ No <u>X</u> 3. Is the facility covered by an individual NPDES permit? Yes _____ No <u>X</u> If Yes, Permit Number _____ 4. Is there a pending application on file with EPA for this discharge? Yes _____ No <u>X</u> If Yes, date of submittal: _____		

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)

- a) Name of receiving water into which discharge will occur: Connecticut River
State Water Quality Classification: B Freshwater: X Marine Water: _____
- b) Describe the discharge activities for which the owner/applicant is seeking coverage: Discharge of non-contact cooling water which originates from private wells and runs through the process and discharges into the river.
- c) FOR MASSACHUSETTS FACILITIES ONLY: Engineering Calculations: Submit the completed engineering calculation of the surface water temperature rise as shown in Attachment A of the General Permit. Check if attached: X
- d) Number of outfalls 2

For each outfall:

- e) What is the maximum daily and average monthly flow of the discharge? Note that EPA will use the flow reported here as the facility's permitted effluent flow limit. Max Daily Flow #001 1 million GPD Average Flow #001 .223 million GPD
#002 1 million #002 .07 million
- f) What is the maximum daily and average monthly temperature of the discharge (in degrees F)? Max Temp. #001 83 Average Temp. #001 65.5
#002 83 #002 62.5
- g) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH #001 8.3 Min pH #001 6.5
#002 8.3 #002 6.5
- h) FOR MASSACHUSETTS FACILITIES ONLY: Is the source water of the NCCW potable water? Yes _____ No X If Yes, EPA will calculate the Total Residual Chlorine limit for facilities located in Massachusetts.
- i) Is the discharge continuous? Yes _____ No X If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B) P
If (P), number of days or months per year of the discharge 12 months and the specific months of discharge All;
If (I), number of days/year there is a discharge _____
- j) Latitude and longitude of each discharge within 100 feet: outfall 1: long. 72 36 30 lat. 42 11 30 ; outfall 2: long. 72 36 15 lat. 42 11 30 ; outfall .3: long. _____ lat. _____ (See http://www.epa.gov/tri/report/siting_tool)
- k) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 1778.3 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations. See General Permit Attachment B for equations and additional information.
- MASSACHUSETTS FACILITIES: See Part 3.4 and Appendix 1 of the General Permit for more information on ACEC.
Areas of Critical Environmental Concern (ACEC): Does the discharge occur in an ACEC? Yes _____ No X
If yes, provide the name of the ACEC: _____

3. NCCW Source Water Information. Please provide information about the NCCW source water, using separate sheets as necessary:

a) Indicate source of the NCCW (i.e., municipal water supply, private well, surface water withdrawal, groundwater): Source: <u>Private Wells</u> Name of Source Water: <u>Well Nos.</u> <u>Well #1, #2, #3, #4</u> Is the source registered/permitted under MA Water Management Act or NHDES Water User Registration Rule (Env Wq 2202)? Yes <u>X</u> No <u> </u> If yes, registration number: <u>10613701</u>	b) If source water is surface water: i) Is it a freshwater river or stream Yes <u> </u> No <u>X</u> ii) Is it a lake? <u> </u> reservoir? <u> </u> iii) Is it tidal river? <u> </u> estuary? <u> </u> ocean? <u> </u> c) Is the source water groundwater? Yes <u>X</u> No <u> </u> If yes, see Appendix 8 and submit effluent and surface water test results, as required in Part 5.4 of the General Permit. d) Does the facility use both a primary and backup source of noncontact cooling water? Yes <u>X</u> No <u> </u> If yes, attach information that identifies and explains the primary and backup sources of noncontact cooling water for and how often the backup supply was used in last three years.
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4. Best Technology Available for CWIS

Are you subject to BTA requirements at Part 4.2 of the General Permit? (Facility's discharge is covered by this General Permit and the facility withdraws noncontact cooling water from surface source water). Yes No X If No, explain: Private wells, no CWIS present.

If YES, attach the facility-specific BTA description as required in Part 4.3 of the General Permit. For additional information and guidance, see Questions 13-23 of the NCCW Fact Sheet, posted at <http://www.epa.gov/region1/npdes/nccwgp.html>. Provide a map showing the location of each CWIS intake structure; NCCW outfall(s) and any CWIS feature referred to in the BTA description.

Include in your description:

- Measures to meet the General Permit Part 4.3.a general BTA requirements, including documentation that describes the facility's monitoring program for impinged fish and/or invertebrate; or the required alternative monitoring plan frequency and/or protocol
- A characterization of the source water body's aquatic life habitat in the vicinity of each CWIS during the seasons when the CWIS may be in use
- The attributes of the current CWIS
- Design measures of the CWIS
- Operation measures of the CWIS
- Historical occurrence of impinged fish for the past five years
- If applicable, a demonstration that the facility's intake rate is commensurate with a closed-cycle recirculation system
- Other components to reduce impingement and/or entrainment of aquatic life

4. BTA FOR CWIS CONTINUED:

Provide the following information for each CWIS to support your attached facility-specific BTA description.

Design capacity of the of the CWIS _____MGD

Maximum monthly average intake of the CWIS during the previous five years _____MGD Month in which this flow occurred _____

Maximum through-screen design intake velocity _____feet/second (fps)

For facilities where the CWIS is located on a freshwater river or stream, provide the following information:

The source water's annual mean flow _____cubic feet/second (cfs) as available from USGS or other appropriate source

The design intake flow as a % of the source water's annual mean flow _____ Attach calculations if equal to or less than 5% of annual mean flow.

The source water's 7Q10 _____cfs. See Attachment B of the General Permit for more information on 7Q10 determinations.

The design intake flow as a percent of the source water's 7Q10 _____

5. Contaminant Information

If applicable, attach a listing of all non-toxic pH neutralization and/or dechlorination chemicals used, including chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the NCCW discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC₅₀ in percent for aquatic organism(s)).

6. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendix 2, Part C, Step 4, of the General Permit. In addition, respond to the following questions.

- a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes X No _____
- b) Has any consultation with the federal services been completed? Yes _____ No X
- c) Is consultation underway? Yes X No _____
- d) What were the results of the consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service (check one):
a "no jeopardy" opinion _____or written concurrence _____on a finding that the discharges are not likely to adversely affect any endangered species or
- e) Which of the five eligibility criteria listed in Appendix 2, Section B (A,B,C,D or E) have you met? _____
- f) Attach a copy of the most current federal listing of endangered and threatened species from the USF&W web site listed in Appendices 2, 2.1 and 4

7. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:

Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes _____ No X

Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No X If yes, attach the results of the consultation(s).

c) Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section C (1,2 o3) have you met? 1

8. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

9. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

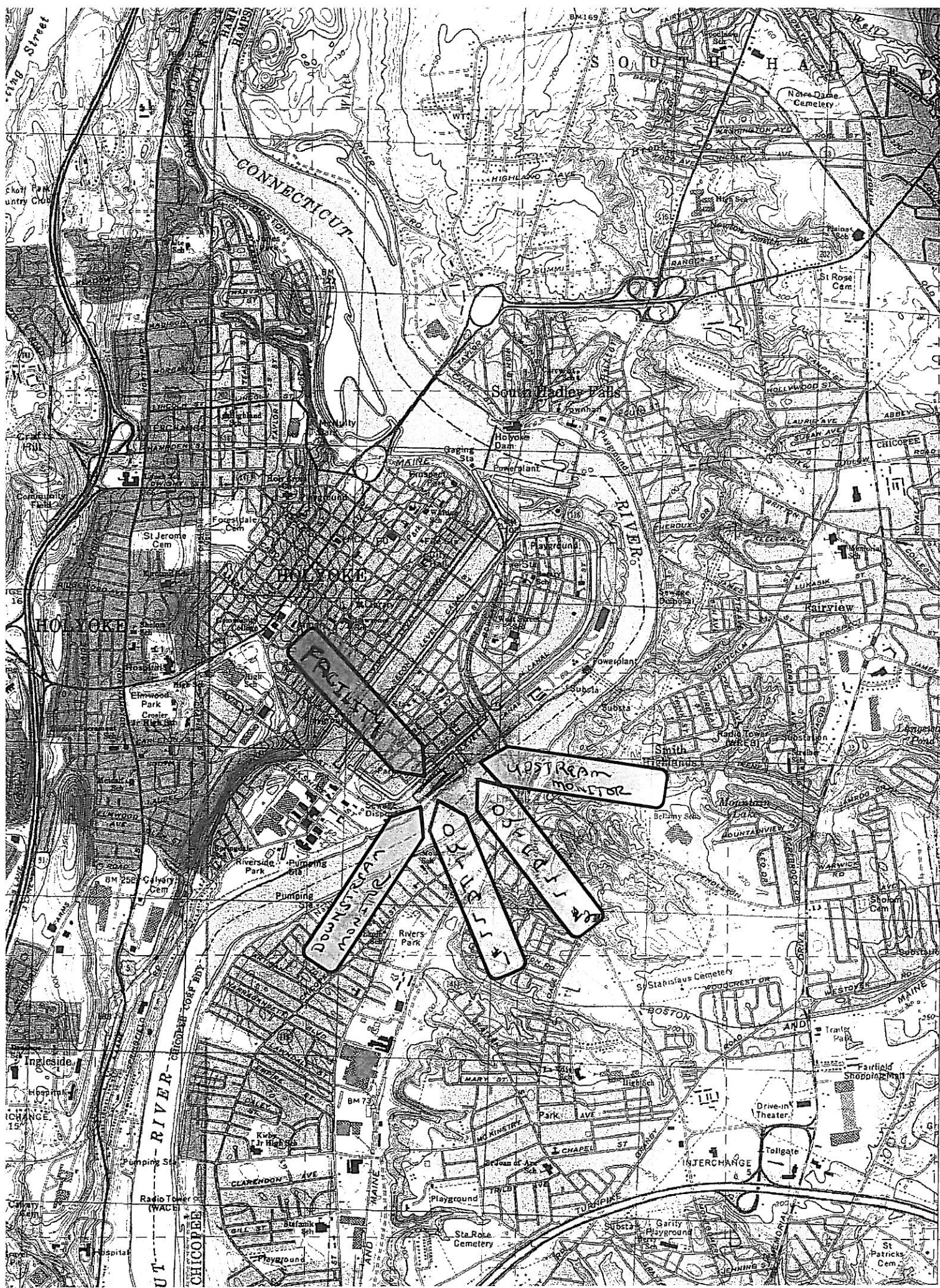
I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the noncontact cooling water (NCCW) system; (2) the discharge consists solely of NCCW (to reduce temperature) and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product (other than heat) or finished product; (4) if the discharge of noncontact cooling water subsequently mixes with other wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for noncontact cooling water; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name:	HAZEN PAPER COMPANY
Operator signature:	Timothy R. McDonald
Title:	VP TECHNICAL SERVICES
Date:	9-23-08

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.



142° 14' 0" N
142° 13' 0" N
142° 12' 0" N
142° 11' 0" N
142° 10' 0" N

14678999
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Item
Number

2. c) Surface Water Temperature Rise

ΔT_r = change in river temperature, °F

m_r = mass of river, lbs(gal.or cubic feet per second if volume is used) Use 7Q10 1147 mgd

m_p = mass of effluent, lbs (gal or cubic feet per second if volume used)

ΔT_p = change in temperature, effluent - influent °F = 65.5-78.44 -12.94

$$^{\circ}\text{F} = (^{\circ}\text{C} \times 9) / 5 + 32$$

effluent 16.9 °C : 65.5

Influent 16 °C = 60.8

River Upstream: 78.44

River downstrm: 78.44

$$\begin{aligned}\Delta T_r &= m_p / m_r \times \Delta T_p \\ &= (1\text{mgd} / 1147\text{ mgd}) \times -12.94\text{ }^{\circ}\text{F} \\ \Delta T_r &= -0.011281604\end{aligned}$$

2. k) 7Q10 in cfs

7Q10	Conversion
mgd	factor

$$= 1147 \text{ .645mgd/cfs}$$

$$= \frac{1147 \text{ mgd} \times 1\text{cfs}}{\text{.645mgd/cfs}}$$

$$1778.294574 \text{ cfs}$$

3. d) The primary source of water is the four wells that have been registered under the MA Water Management Act. The back-up source of the water is city water. The back-up source of water is used only when the pumps for the wells fail. It has been used very sporadically in the past three years. The maximum use would be 85,000 mgd.

James Nathan
 Tighe & Bond
 53 Southampton Road
 Westfield, MA 01085

Job Number: 360-18581-1

Client Sample ID: Effluent
 Lab Sample ID: 360-18581-1

Date Sampled: 09/05/2008 1420
 Date Received: 09/05/2008 1615
 Client Matrix: Wastewater

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: 200.7 Rev 4.4		Date Analyzed:	09/08/2008 1442	
Prep Method: 200.7		Date Prepared:	09/08/2008 0705	
Silver	ND	ug/L	5.0	1.0
Arsenic	ND	ug/L	10	1.0
Cadmium	ND	ug/L	1.0	1.0
Chromium	ND	ug/L	5.0	1.0
Copper	24	ug/L	10	1.0
Iron	360	ug/L	100	1.0
Nickel	ND	ug/L	10	1.0
Antimony	ND	ug/L	6.0	1.0
Zinc	ND	ug/L	50	1.0
Method: 245.1		Date Analyzed:	09/11/2008 0906	
Prep Method: 245.1		Date Prepared:	09/10/2008 0803	
Mercury	0.73	ug/L	0.20	1.0
Method: 300.0		Date Analyzed:	09/06/2008 1311	
Chloride	13	mg/L	1.0	1.0
Method: SM 3500 CR D		Date Analyzed:	09/05/2008 1710	
Chromium (hexavalent)	ND	mg/L	0.0050	1.0
Method: SM 4500 H+ B		Date Analyzed:	09/05/2008 1704	
pH	7.12	HF SU	0.100	1.0

1-1A-2-1-1

James Nathan
Tighe & Bond
53 Southampton Road
Westfield, MA 01085

Job Number: 360-18581-1

Client Sample ID: Connecticut R. - Upstream
Lab Sample ID: 360-18581-2

Date Sampled: 09/05/2008 1455
Date Received: 09/05/2008 1615
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: SM 2340B				
Hardness as calcium carbonate	46	mg/L	2.6	1.0

Date Analyzed: 09/11/2008 1748

SAMPLE COLLECTION DATA SURFACE WATER

Client: Tycho + Bond Job Number: 360-18581
53 Southampton Rd Sampling Location: Conn. River - Downstream
Westfield, MA
 Contact: JPN Date: 9/5/08 Time Collected: 1425
 Collected By: am

Weather: Sunny 80°F

Sampling Method:

Surface: ✓
 Stainless Steel Bucket:

Bottle:
 Other:

Sample Type: Grab: ✓

Composite: if so describe

FIELD DATA

pH	Dissolved Oxygen mg/L	Specific Conductance $\mu\text{mhos/cm @25}^{\circ}\text{C}$	Temperature $^{\circ}\text{C}$	Residual Chloride mg/L	Time Analyzed
<u> </u>	<u> </u>	<u> </u>	<u>25.8</u>	<u> </u>	<u> </u>

CONTAINERS & PRESERVATIVES

Type of Container	Number of Containers	Preservative Type/Amount	Analysis Required	Field pH
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

*Field Analysis only
 Ch. 9/5/08*

If sample was taken for dissolved metals, were these samples field filtered? N/A

Date: Time: By: Filter Pore Size & Type:

General Notes: Heck pH meter calibrated for pH + Temp. Ch. 9/5/08

HAZEN PAPER

Job Number: 360-18581
Sampling Location: Conn. River ☒ UpStream

Time Collected: 1455

Weather Sunny 80°F

Surface: ✓
Stainless Steel Bucket:

Bottle: _____
Other: _____

Grab: ☒

Composite: _____ if so describe _____

FIELD DATA						
pH	Dissolved Oxygen mg/L	Specific Conductance µmhos/cm @25°C	Temperature °C	Residual Chloride mg/L		Time Analyzed
6	-	-	25.8	✓		1425

[illegible]

If sample was taken for dissolved metals, were these samples field filtered? n/a

Date: _____ Time: _____ By: _____ & Type: _____

General Notes: _____

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Raynham and Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Glocester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hadley, Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, and Wareham
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

- Eastern cougar and gray wolf are considered extirpated in Massachusetts.
- Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
- Critical habitat for the Northern Red-bellied cooter is present in Plymouth County.

7/31/2008

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN MASSACHUSETTS

Only Plymouth County has federally-designated Critical Habitat in Massachusetts. The following are federally-listed species by county:

Common Name	Species	Status	County/General Distribution
Shortnose sturgeon ¹	<i>Acipenser brevirostrum</i>	E	Atlantic coastal waters and Connecticut and Merrimack Rivers
Eastern cougar	<i>Felis concolor couguar</i>	E	Entire state/historic
Indiana bat	<i>Myotis sodalis</i>	E	Berkshire/historic
Bald eagle	<i>Haliaeetus leucocephalus</i>	D ²	Barnstable, Berkshire, Essex, Franklin, Hampden, Hampshire, Plymouth, Worcester
Piping plover	<i>Charadrius melodus</i>	T	Nesting: Barnstable, Essex, Plymouth, Dukes, Nantucket, Bristol (coastal beaches only) Migratory: Atlantic Coast
Roseate tern	<i>Sterna dougallii dougallii</i>	E	Nesting: Barnstable, Plymouth, Dukes (coastal islands) Migratory: Atlantic Coast
Bog turtle	<i>Clemmys muhlenbergii</i>	T	Berkshire
Dwarf wedgemussel	<i>Alasmidonta heterodon</i>	E	Hampshire, Franklin (Connecticut River watershed)
Puritan tiger beetle	<i>Cicindela puritana</i>	T	Hampshire (Connecticut River floodplain)
Northeastern beach tiger beetle	<i>Cicindela dorsalis dorsalis</i>	T	Barnstable, Duke (coastal beaches only)
American burying beetle	<i>Nicrophorus americanus</i>	E	Dukes, Nantucket (Penikese & Nantucket Isl.) reintroduced populations
Small whorled pogonia	<i>Isotria medeoloides</i>	T	Hampshire, Essex, Hampden, Worcester, Middlesex
Sandplain gerardia	<i>Agalinus acuta</i>	E	Barnstable, Duke
Northeastern bulrush	<i>Scirpus ancistrochaetus</i>	E	Franklin

¹ Principal responsibility for this species is vested with the National Marine Fisheries Service.

² Delisted. Protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

Massachusetts

Common Name	Scientific Name	Status	Distribution
FISHES:			
Sturgeon, shortnose*	Northeastern bulrush	E	Atlantic coastal water; and rivers (Conn. R.)
REPTILES:			
Turtle, bog	Clemmys muhlenbergii	T	Berkshire County
Turtle, green*	Chelonia mydas	T	Oceanic straggler in s England
Turtle, hawksbill*	Eretmochelys imbricata	E	Oceanic straggler in s England
Turtle, leatherback*	Dermochelys coriacea	E	Oceanic summer resid
Turtle, loggerhead*	Caretta caretta	T	Oceanic summer resid
Turtle, Atlantic ridley*	Lepidochelys kempii	E	Oceanic summer resid
Turtle, Northern red-bellied couler (Plymouth redbelly)	Chrysemys rubriventris bangsi	E	Plymouth & Dukes C
BIRDS:			
Plover, piping		T	Atlantic coast, nesting
Tern, roseate	Charadrius melodus	E	Atlantic coast/islands,
	Sterna dougallii dougallii		
MAMMALS:			
Bat, Indiana		E	Berkshire County/hist
Whale, blue*	Myotis sodalis	E	Oceanic
Whale, finback*	Balaenoptera musculus	E	Oceanic
Whale, humpback*	Balaenoptera physalus	E	Oceanic
Whale, right*	Megaptera novaeangliae	E	Oceanic
Whale, sei*	Eubalaena spp. (all species)	E	Oceanic
Whale, sperm*	Balaenoptera borealis	E	Oceanic
	Physeter catodon		
MOLLUSKS:			
Wedgemussel, dwarf		E	Hampshire, Franklin C
	Alasmidonta heterodon		
INSECTS:			
Beetle, Puritan tiger		T	Hampshire County
Beetle, Northeastern beach	Cicindela puritana	T	Dukes & Bristol Cour
Beetle, American burying	Cicindela dorsalis dorsalis	E	Penikese & Nantucket reintroduced populati
	Nicrophorus americanus		
PLANTS:			
Small whorled pogonia		T	Hampshire, Essex, Ha
	Isotria medeoloides		Worcester, Middlesex
Sandplain gerardia		E	Barnstable & Dukes C
Northeastern bulrush	Agalinus acuta	E	Franklin County
	Scirpus ancistrochaetus		

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service
Rev. 1/8/02