

9/2/08
received

APPENDIX 5

Suggested Form for Notice of Intent (NOI) for the Noncontact Cooling Water General Permit

1. General facility information. Please provide the following information about the facility.

a) Name of facility: <u>Norfolk & Dedham Mutual Fire Insurance Company</u>		Type of Business: <u>Insurance Company</u>
Facility Location Address : <u>222 Ames St., Dedham, MA</u> <u>02026</u> longitude: <u>71° 10' 30"</u> latitude: <u>42° 15' 05"</u>	Facility SIC codes: <u>6361</u>	Facility Mailing Address (if not location address) <u>222 Ames St.</u> <u>P.O. Box 9109</u> <u>Dedham, MA 02027</u>
b) Name of facility owner: <u>same as above</u>		Email address of owner:
Owner's Tel #: <u>781-326-4010</u> Owner's Fax #: <u>781-329-1818</u>		Owner is (check one): 1. Federal ☐ 2. State ☐ 3. Tribal ☐ 4. Private ☒ 4. Other ☐ (Describe)
Address of owner (if different from facility address)		
Legal name of Operator, if not owner: _____		
Operator Contact Name: <u>Robert G. Street</u>		
Operator Tel Number: <u>781-326-4010</u> Fax Number: <u>781-329-1818</u>		
Operator's email: <u>rstreet@ndgroup.com</u>		
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 ☒ No ☐ If Yes, Permit Number: <u>MAG250034</u>		
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes ☐ No ☒		
3. Is the facility covered by an individual NPDES permit? Yes ☐ No ☒ If Yes, Permit Number _____		
4. Is there a pending application on file with EPA for this discharge? Yes ☐ No ☒ 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: Charles River
State Water Quality Classification: Class B Freshwater: X Marine Water: _____
- b) Describe the discharge activities for which the owner/applicant is seeking coverage: Storm drainage & cooling water
- 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: _____
- d) Number of outfalls 3

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 .093 GPD Average Flow .073 GPD
- f) What is the maximum daily and average monthly temperature of the discharge (in degrees F)? Max Temp. 78 Average Temp. 73
- g) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 6.5 Min pH 6.1
- 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 X No _____ 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) _____
If (P), number of days or months per year of the discharge _____ and the specific months of discharge _____;
If (I), number of days/year there is a discharge _____
- j) Latitude and longitude of each discharge within 100 feet: outfall 1: long. 71° lat. 42°; outfall 2: long. 71° lat. 42°;
outfall 3: long. 71° lat. 42° (See http://www.epa.gov/tri/report/siting_tool/index.htm)
- k) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 8.3 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 Well</u> Name of Source Water: _____ Is the source registered/permitted under MA Water Management Act or NHDES Water User Registration Rule (Env Wq 2202)? Yes _____ No _____ If yes, registration number: _____	b) If source water is surface water: i) Is it a freshwater river or stream Yes _____ No _____ ii) Is it a lake? _____ reservoir? _____ iii) Is it tidal river? _____ estuary? _____ ocean? _____ c) Is the source water groundwater? Yes _____ No _____ 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 _____ No <u>X</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.
---	---

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: Source water withdrawal from Private Well.

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 _____ No X
- b) Has any consultation with the federal services been completed? Yes _____ No _____
- c) Is consultation underway? Yes _____ 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:

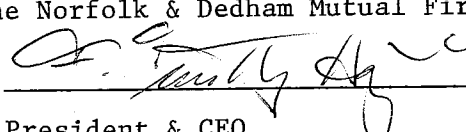
- a) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes _____ No X
- b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No _____ 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? _____

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:	The Norfolk & Dedham Mutual Fire Insurance Company
Operator signature:	
Title:	President & CEO
Date:	August 27, 2008

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.



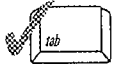
Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Watershed Permitting Program
BRP WM 11
Request for General Permit Coverage
Surface Water Discharge Of Non-Contact Cooling Water

W058159
Transmittal Number

Date Received

A. Facility Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.



1. Project owner:

Norfolk & Dedham Mutual Fire Insurance Company

Name

222 Ames Street

Street Address/PO Box

MA

State

Robert G. Street

Contact Person

Dedham

City

02026

Zip Code

781-326-4010

Telephone Number

2. Project operator (if different from above):

Name

Street/PO Box:

City

State

Zip Code

Contact Person

Telephone Number

3. Facility data (attach topographic map or other map showing facility location):

Norfolk & Dedham Mutual Fire Insurance Company

Name

222 Ames Street

Street/ PO Box

Dedham

City

MA

State

02026

Zip Code

Email address (optional)

781-326-4010

Telephone Number

Robert G. Street

Contact Person

4. Standard Industrial Codes (SIC) and description:

6361

Standard Industrial Code (SIC)

Insurance Company

Description



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Watershed Permitting Program

BRP WM 11

Request for General Permit Coverage

Surface Water Discharge Of Non-Contact Cooling Water

W058159

Transmittal Number

Date Received

B. Effluent Characteristics

Refer to general permit in Federal Register Volume 65, Number 80, April 25, 2000, page 24195-24211:

	Average Monthly	Maximum Daily
Flow, gpd [< 1 MGD]	.074	.094
Temperature	68°	77°
[Warm water fishery must be $< 83^{\circ}\text{F}$ (28.3°C)] [Cold water fishery effluents must be $< 68^{\circ}\text{F}$ (20°C)]		
pH (freshwater 6.5-8.3, saltwater 6.5-8.5)	7.2	7.9

Total Residual Chlorine (for potable water supply source only):

Water source of non-contact cooling water (e.g., municipal, stream withdrawal):

Private Well

Receiving waterbody:

Charles River

C. Certifications

1. The applicant certifies that the discharge consists solely of non-contact cooling water to reduce temperature, and does not come in direct contact with any raw materials, intermediate product, waste product (other than heat), or finished product.

☒ Yes ☐ No

2. The applicant certifies that no biocides or other chemical additives for any purpose are used in the non-contact cooling water.

☒ Yes ☐ No

I certify that the discharge for which I am seeking coverage under the general permit consists solely of non-contact cooling water. I certify under penalty of law that 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 inquiry of the persons or persons directly responsible for gathering the information, I certify that the information 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.

Signature

Robert G. Street, Division Manager

Printed Name and Title

Date

12/22/04



Enter your transmittal number

W058159

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://www.mass.gov/dep/counter/trasmfrm.shtml> or call DEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application.
Copy 2 must accompany your fee payment.
Copy 3 should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

DEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

BRP WM 11

1. Permit Code: 7 or 8 character code from permit instructions

Cooling for HVAC system

3. Type of Project or Activity

Non-contact cooling water

2. Name of Permit Category

B. Applicant Information - Firm or Individual

Norfolk & Dedham Mutual Fire Insurance Company

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

222 Ames Street

5. Street Address

Dedham

6. City/Town

Robert G. Street

11. Contact Person

3. First Name of Individual

MA

7. State

02026

8. Zip Code

781-326-4010

9. Telephone #

4. MI

1189

10. Ext. #

rstreet@ndgroup.com

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Norfolk & Dedham Mutual Fire Insurance Company

1. Name of Facility, Site Or Individual

222 Ames Street

2. Street Address

Dedham

3. City/Town

MA

4. State

02026

5. Zip Code

781-326-4010

6. Telephone #

1189

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

1. Name of Firm Or Individual

2. Address

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☐ no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

1. ☐ Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date

NEWTON QUADRANGLE
MASSACHUSETTS
7.5 MINUTE SERIES (TOPOGRAPHIC)

NORFOLK & DEDHAM MUTUAL FIRE INSURANCE CO.

Discharge 001

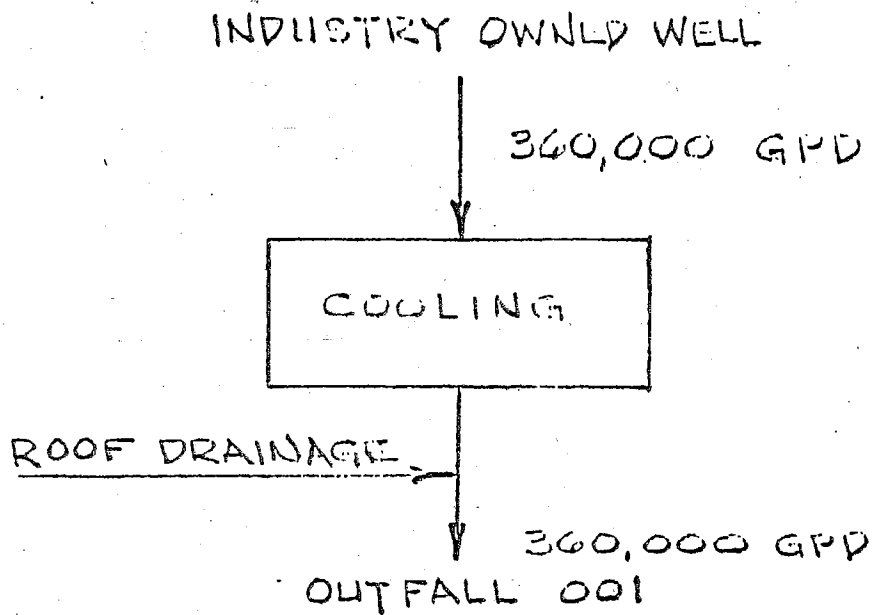
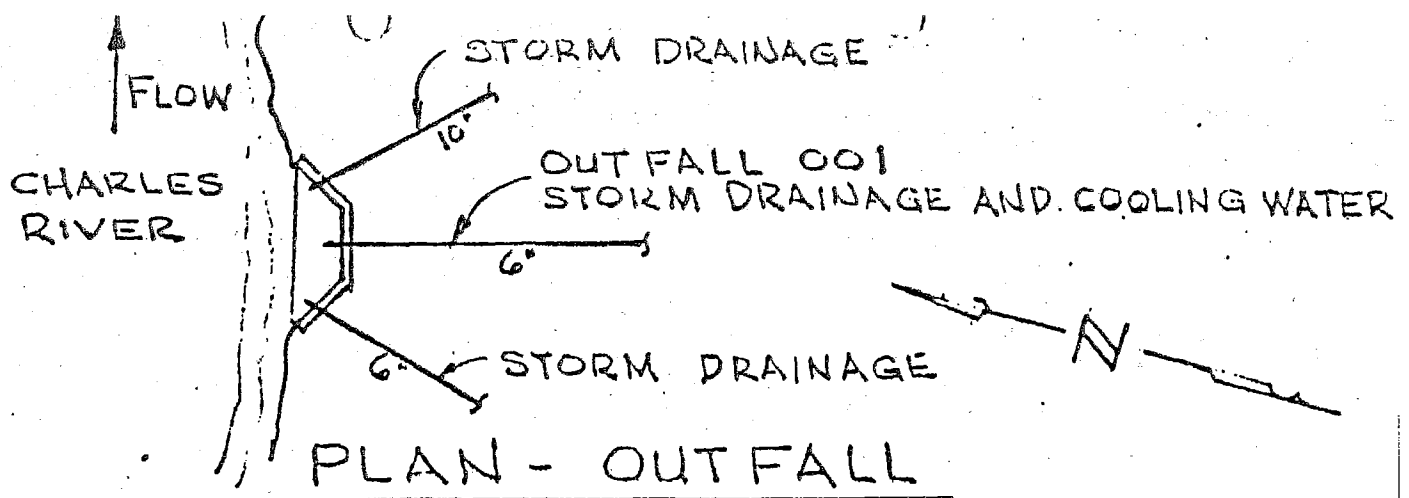
NORWOOD QUADRANGLE
MASSACHUSETTS

7.5 MINUTE SERIES (TOPOGRAPHIC)

SCALE 1:25 000

CONTOUR INTERVAL 10 FEET
 DATUM IS MEAN SEA LEVEL

UTM GRID AND 1979 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



		NORFOLK & DEDHAM MUT. FIRE INS. CO DEDHAM, MA.	
		SCHEMATIC OF WATER FLOW	
5/1/28	PERMIT	SCALE NONE	
DATE	ISSUED FOR	CLIENT	JOB
DRAWN BY	CHECKED BY	DWS NO	
IN CHARGE	APPROVED	1928-16-SKP1	

MAIN
CHAS. T. MAIN, INC.
BOSTON • CHARLOTTE • DENVER • PORTLAND



DEVAL PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Watershed Management, 627 Main Street 2nd Floor, Worcester, MA 01608

IAN BOWLES
Secretary

ARLEEN O'DONNELL
Commissioner

TO: Robert G. Street
Norfolk + Dedham Mutual Fire Insurance Co
222 Ames St.
Dedham, MA 02026

DATE: 5/1/07

Here is the information you requested from DEP Division of Watershed Management:

Please mark the location of your
well and the non-contact cooling
water discharge point and return to me.

Thanks.

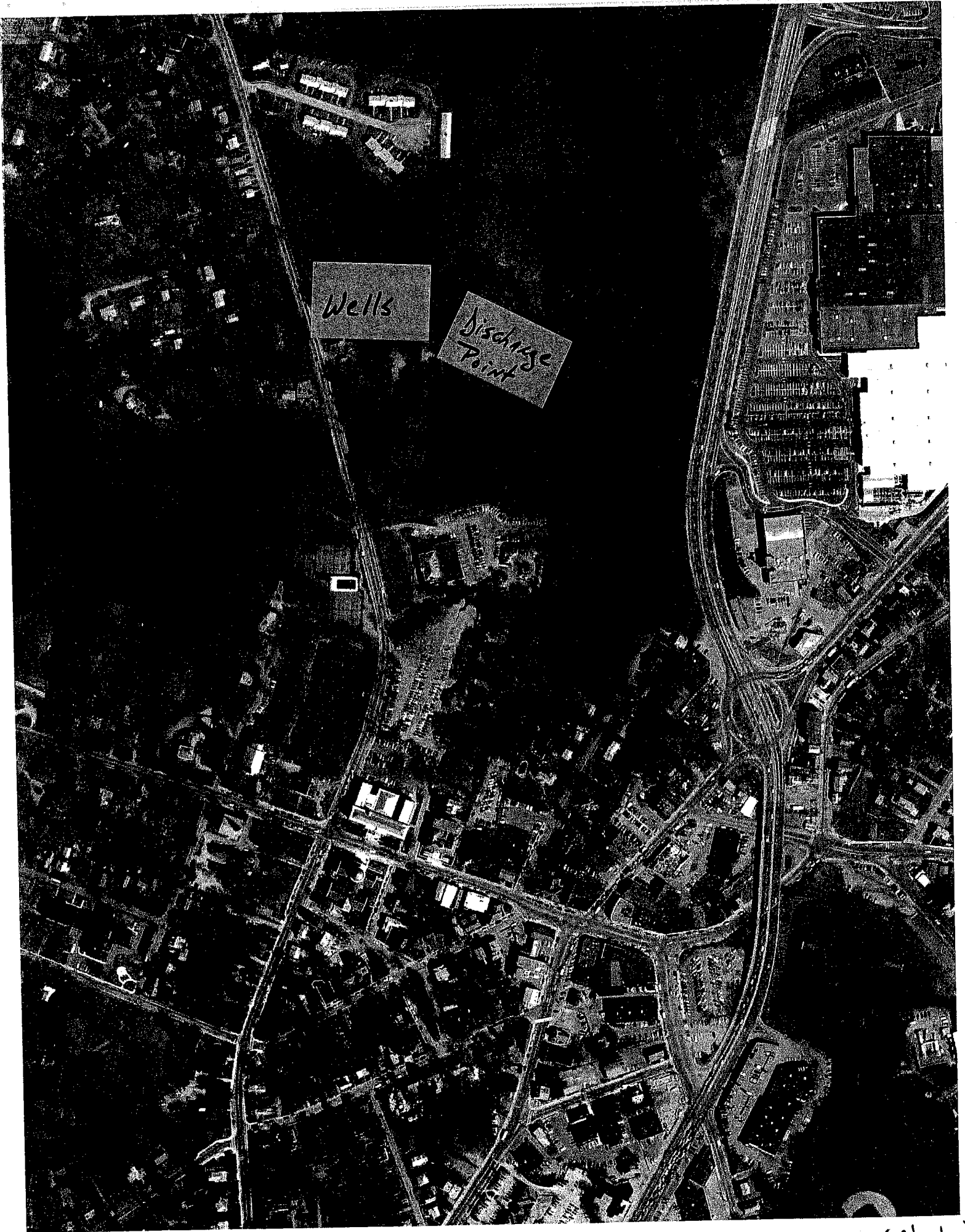
To JEP 5/3/07

If you have any questions on this material, please contact:

Kathleen Keohane
MassDEP
Division of Watershed Management
Surface Water Permits Program
508-767-2856
Fax: 508-791-4131
Kathleen.Keohane@state.ma.us

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at (617) 556-1057.
<http://www.mass.gov/dep> • Phone (508) 792-7470 • Fax (508) 791-4131

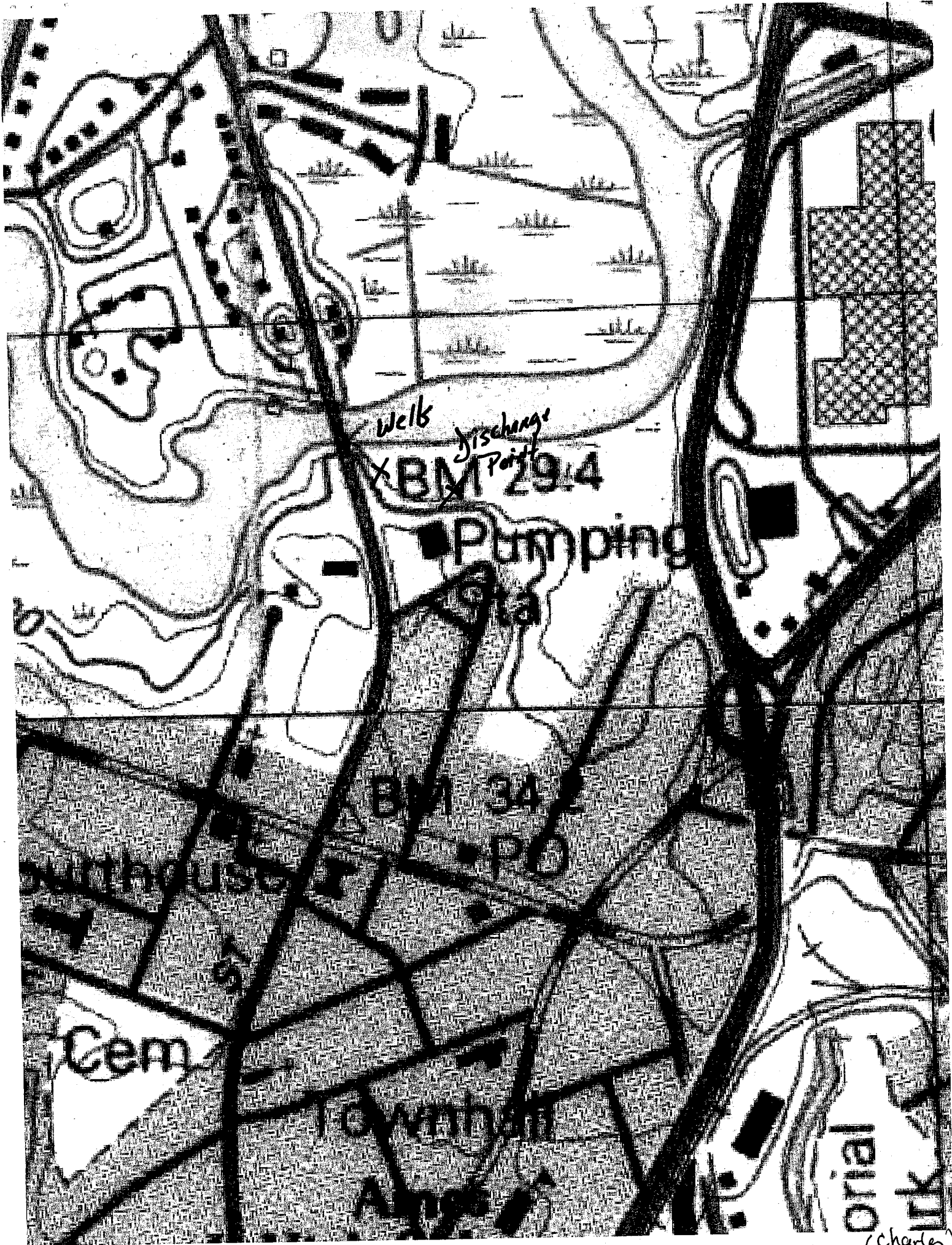
Printed on Recycled Paper



25002d

116 J. Dedham Mutual Fire Ins. Co. Dedham

(Charles)



1000 2500 3000

Norfolk & Dedham Mutual Fire Insurance Co. Dedham

(Charles)