

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>UNION WHARF CONDO TRUST</u>		Type of Business: <u>Residential and Office</u>
Facility Location Address: <u>343 Commercial St. Boston, MA 02109</u> longitude: <u>71.0303</u> latitude: <u>42.359</u> {see attached}		Facility Mailing Address (if not location address): <u>SAME</u>
b) Name of facility owner: <u>see above</u>		Email address of owner: <u>UNION WHARF MANAGEMENT, INC.</u>
Owner's Tel #: <u>617-742-1647</u>	Owner's Fax #: <u>617-740-0456</u>	Owner is (check one): 1. Federal _____ 2. State _____ 3. Tribal _____ 4. Private ☒ 5. Other _____ (Describe) _____
Address of owner (if different from facility address): <u>SAME</u>		
Legal name of Operator, if not owner: <u>see above</u>		
Operator Contact Name: <u>DAN FLAHERTY</u>		
Operator Tel Number: <u>see above</u> 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 ☒ No _____ If Yes, Permit Number: <u>FILED 1996 / never</u>		
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes ☒ No ☒ If Yes, Permit Number: <u>10001</u>		
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: <u>(see attached)</u>		

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

a) Name of receiving water into which discharge will occur: BOSTON HARBOR Freshwater: Marine Water:
 State Water Quality Classification:

b) Describe the discharge activities for which the owner/applicant is seeking coverage: 100 gpd non-contact 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 1 discharge. See attached Summary of Operations

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 1100 GPD Average Flow 1100 GPD

f) What is the maximum daily and average monthly temperature of the discharge (in degrees F)? Max Temp. 68° Average Temp. 58°

g) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 6.77 Min pH } see Attached

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 ✓ 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 0 and the specific months of discharge May to November; If (I), number of days/year there is a discharge

j) Latitude and longitude of each discharge within 100 feet: outfall 1: long. -71° 03' 03" lat. 42° 21' 59" outfall 2: long. lat. outfall 3: long. lat. (See http://www.epa.gov/tri/report/siting_tool) SEE ATTACHED

k) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 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: BOSTON INNER HARBOUR
 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 X
 ii) Is it a lake? _____ reservoir? _____
 iii) Is it tidal river? _____ estuary? _____ ocean? _____
 c) Is the source water groundwater? Yes _____ No X 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 X
 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

See attached Original Application

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 _____
 If No, explain:

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: *See attached Original Application*

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

See Attached Summary of Operations

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. *See attached Original Application*

- a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes No No X
- b) Has any consultation with the federal services been completed? Yes No No X
- c) Is consultation underway? Yes No No X
- 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 X No _____
- 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 or 3) 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: Union Wharf Condominium Trust

Operator signature: 

Title: Chair, Board of Trustees

Date: 9/3/09

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.

FIELD SAMPLING REPORT

Client: Ms. Susan A. Bernstein, Esq.
200 Highland Ave
Suite 306
Needham, MA 02494-3035
Report Date: August 31, 2009

Site Location: Union Wharf, 343 Commercial Street, Boston, MA
Outfall Location(s): Outfall to Boston Harbor
Sample Date: August 31, 2009
Field Technician(s): Matt Gould

Summary:

On the morning of August 31, 2009 EST field staff collected a pH and temperature sample from an outfall pipe to Boston Harbor containing non-contact cooling water. The line identified on site as "Seawater Discharge" was purged for five (5) minutes prior to sample collection. A pH of 6.97 s.u. and temperature of 19.4 °C was recorded. Field instrumentation was calibrated in accordance with the manufacturer's specifications prior to sample collection. A copy of the calibration record is provided as an attachment to this report.

Date of Sample Collection	8/31/2009
Time of Sample Collection	0915
Sample Site Identification	Non Contact Cooling Water
Field pH	6.97 s.u
Field Temperature	19.4 °C

Reviewed By: 

Date:

Environmental Sampling Technology
Calibration Form

Page of

Purchase Order Number: _____

Reference Number: _____

Site:

Union Warf

Contact:

Dan Flaherty

Address:

343 Commercial St.
Boston Ma

Title:

Phone:

Site Description: _____

Equipment On Site:

Model # 548002608

Serial # 284069

Description of Service: _____

Special Instructions: _____

____pH ____Flow
Before Calibration:

NA

____pH ____Flow
After Calibration:

NA

STANDARD CALIBRATION

	Before Calibration	After Calibration
pH Buffer 4.0	3.74	4.00
pH Buffer 7.0	7.25	7.00
pH Buffer 10.0	10.37	10.05

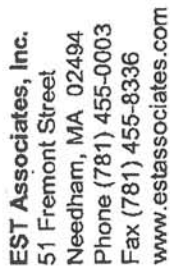
Notes: _____

Technician's Name:

Matt Gould

Signature:

Matt Gould



Laboratory:

n/a

Container Type
P - Plastic
G - Glass
V - VOA
B - Bacteria

Sample Type
1. Wastewater
2. Groundwater
3. Soil
4. Drinking Water
5. Surface Water
6. Storm Water
7. Other _____

EST Invoice To: Susan Bernstein
5858-

Site: Union Wharf

Client: Susan A. Bernstein

Address: 343 Commercial St.

Address: 200 Highland Ave, Ste 306

Boston
MA

Needham MA 02494-3035

Contact: Dan Flaherty

Contact: Susan A. Bernstein

Phone #: (617) 742-1647

Phone #: (781) 290-5858

Description: *Non-contact Cooling Water*

Fax #: (781) 247-4266

☐ Rush _____ Day Turnaround _____[illegible]

*All samples chilled to 4 degrees celsius.

3. Complete pH calibration record prior to sample collection (RD to provide with project paperwork)
4. Site contact will provide access to site. May need peristaltic pump with weighted strainer to draw sample
5. Carefully document sample location
6. Field tech to submit field data (to J. Costello) in order to generate field report within 24 hours of sample collection
7. Report to Susan A. Bernstein in electronic format to email address above

Please contact me if you have any questions.

Thanks,

John

John Carlin

President

EST Associates, Inc.

Phone:(781) 455-0003 x11.

Fax:(781) 455-8336

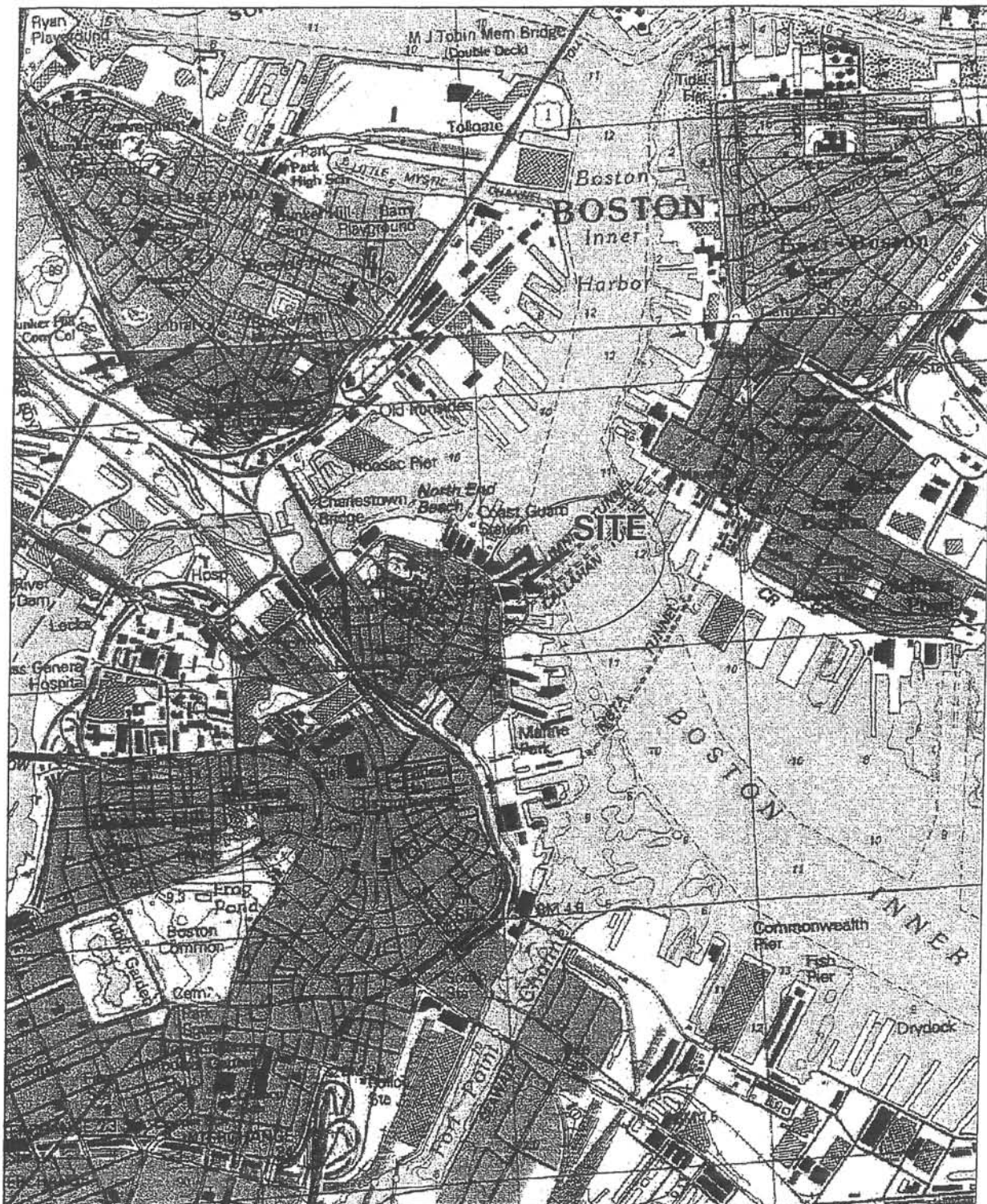
51 Fremont Street, Needham, MA 02494

www.estassociates.com

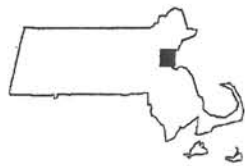
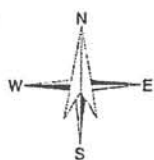
8/31/2009

Union Wharf Condominium Trust, 343 Commercial Street, Boston, MA:
Noncontact Cooling Water Facility
Summary of Operations

- (1) System discharges approximately 1,100 gallons per minute.
- (2) System has the following outfalls:
 - a) three (3) six inch pipes
 - b) two (2) seawater intakes
 - c) one (1) seawater discharge
- (3) Average daily ocean temperature ranges from 50° in April to 68° in October, return temperatures vary by 0 (zero)° or no change (no change in ocean temperature) to a maximum of 10°.
- (4) Typical operational cycle is from May 1st operating continuously through November 1st.
- (5) The intake/discharge pipes are non-chemically cleaned annually. A diver inspects each line and removes by hand any aquatic growth on each of the pipes. The intakes have large strainers that prohibit suction of anything larger than 1/8th of an inch. Typically, only sand and seaweed are found in the pump strainers.
- (6) The demand for cooling in the building is monitored by an automatic control panel in the building, which monitors both the loop and seawater temperatures. An automatic controller opens or closes a series of valves allowing condenser water to automatically bypass the titanium plate heat exchanger. The temperature fluctuation then varies depending on the actual seawater temperature.



SITE COORDINATES: 42°21'56"N 71°3'4"W



U.S.G.S. QUADRANGLE: BOSTON SOUTH, MA

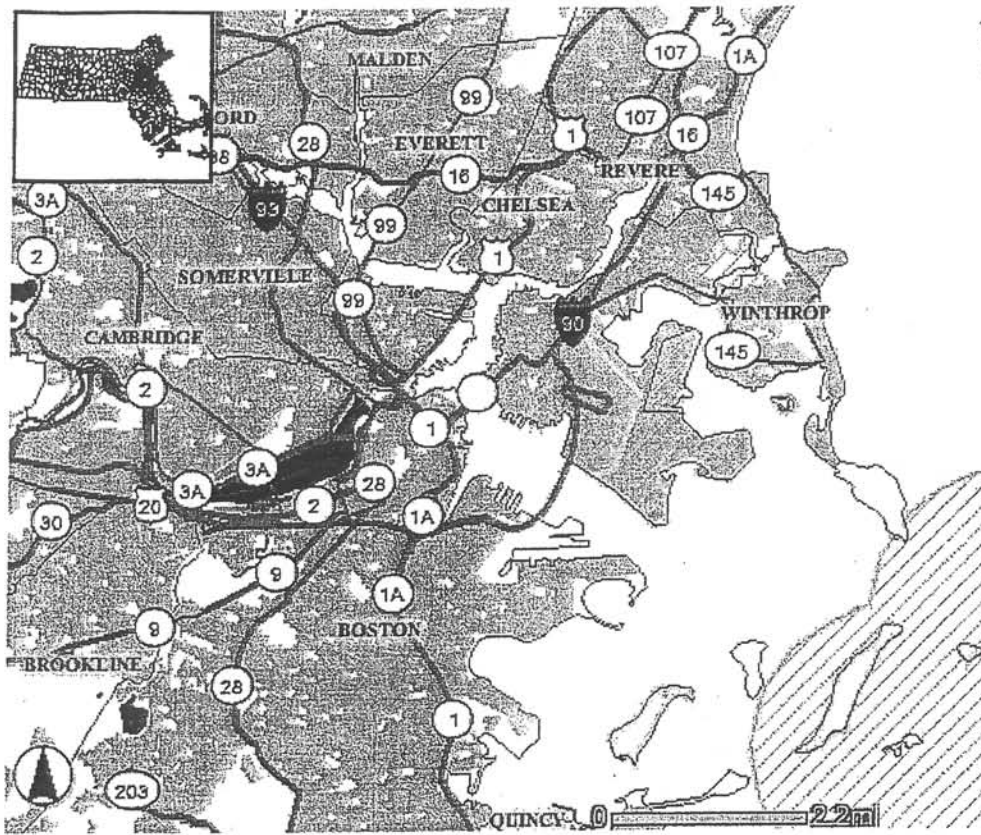
HALEY & ALDRICH

UNION WHARF
343 COMMERCIAL STREET
BOSTON, MASSACHUSETTS

PROJECT LOCUS

SCALE: 1:24,000
OCTOBER 2007

FIGURE 1



NHESP MAP
2006