

10/6/08 -  
received

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Suite 500  
Springfield, MA 01103  
Tel 413 788 6222  
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October 1, 2008

MAG 250968

US EPA, Region 1  
NCCW-NOT Processing  
Municipal Assistance Unit (MCU)  
1 Congress Street, Suite 1100  
Boston, MA 02114-2023

Enclosed is a Notice of Intent (NOI) submitted on behalf of the IntelliCoat Technologies facility located in South Hadley, Massachusetts. Information in the NOI is based on Discharge Monitoring Reports for calendar year 2007. A copy of the NOI is also being submitted to the Massachusetts Department of Environmental Protection.

If you have any questions regarding this submittal, please feel free to contact myself at 413-788-6222 or Scott Allen, Plant Manager of the IntelliCoat Technologies facility at 413-539-5346.

Sincerely,  
O'Reilly, Talbot & Okun associates, Inc.

A handwritten signature in black ink, appearing to read "James Gagnon".

James Gagnon, PE, LSP, CIH  
Associate

Cc.  
Scott Allen  
IntelliCoat Technologies  
28 Gaylord Street  
South Hadley, MA 01075

**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>INTELICOAT Technologies</u>		Type of Business: <u>PAPER AND FILM COATING</u>
Facility Location Address :	Facility SIC codes:	Facility Mailing Address (if not location address)
longitude: <u>72 35 43.537 W</u> latitude: <u>42 13 8.587 N</u>	<u>2672</u>	
b) Name of facility owner: <u>INTELICOAT Technologies</u>		Email address of owner: <u>SALLEN@INTELICOAT.COM</u>
Owner's Tel #: <u>413-539-5346</u>	Owner is (check one): 1. Federal ___ 2. State ___ 3. Tribal ___	
Owner's Fax #: <u>413-539-5057</u>	4. Private <u>X</u> 4. Other ___ (Describe)	
Address of owner (if different from facility address) <u>28 GAYLORD STREET</u> <u>SOUTH HADLEY, MA 01075</u>		
Legal name of Operator, if not owner: <u>SAME</u>		
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>X</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>MAG250968</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 <u>X</u> No ___ If Yes, date of submittal: <u>2-25-2005</u> <u>NOI</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: BUTTERY BROOK  
State Water Quality Classification: B Freshwater: X Marine Water: \_\_\_\_\_

b) Describe the discharge activities for which the owner/applicant is seeking coverage: NON-CONTACT COOLING WATER FROM 10 OUTFALLS

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 10  
For each outfall: OUTFALL 001A

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 12,000 GPD Average Flow 12,000 GPD

f) What is the maximum daily and average monthly temperature of the discharge (in degrees F)? Max Temp. 63.8 Average Temp. 53.1

g) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 6.94 Min pH 6.5

h) FOR MASSACHUSETTS FACILITIES ONLY: Is the source water of the NCCW potable water? Yes X No \_\_\_\_\_ 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. 42:35:43.537W lat. 42:13:8.587W; outfall 2: long. \_\_\_\_\_ lat. \_\_\_\_\_; outfall 3: long. \_\_\_\_\_ lat. \_\_\_\_\_ (See [http://www.epa.gov/tri/report/siting\\_tool](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 0.448 cfs PER MASSDEP  
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: \_\_\_\_\_

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

- a) Name of receiving water into which discharge will occur: BUTTERY BROOK  
State Water Quality Classification: B Freshwater: X Marine Water: \_\_\_\_\_
- b) Describe the discharge activities for which the owner/applicant is seeking coverage: NON-CONTACT COOLING WATER FROM 10 OUTFALLS
- 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 10

For each outfall: OUTFALL 007A

- 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 20,000 GPD Average Flow 20,000 GPD
- f) What is the maximum daily and average monthly temperature of the discharge (in degrees F)? Max Temp. 65.8 Average Temp. 52.1
- g) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 6.84 Min pH 6.5
- h) FOR MASSACHUSETTS FACILITIES ONLY: Is the source water of the NCCW potable water? Yes X No \_\_\_\_\_ 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. 42:35:43.537W lat. 42:13:8.587W; outfall 2: long. \_\_\_\_\_ lat. \_\_\_\_\_; outfall 3: long. \_\_\_\_\_ lat. \_\_\_\_\_ (See [http://www.epa.gov/tri/report/siting\\_tool](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 0.448 cfs PER MASSDEP  
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:**

<p>a) Indicate source of the NCCW (i.e., municipal water supply, private well, surface water withdrawal, groundwater):                  Source: <u>MUNICIPAL WATER SUPPLY</u>                  Name of Source Water: <u>SOUTH HADLEY</u>  <u>MUNICIPAL SUPPLY (QUABBIN RES.)</u>                  Is the source registered/permitted under MA Water Management Act or NHDES Water User Registration Rule (Env Wq 2202)?                  Yes <input type="checkbox"/> No <input type="checkbox"/>                   If yes, registration number: _____</p>	<p>b) If source water is surface water:                  i) Is it a freshwater river or stream Yes <input type="checkbox"/> No <input type="checkbox"/>                  ii) Is it a lake? _____ reservoir? <u>QUABBIN</u>                  iii) Is it tidal river? _____ estuary? _____ ocean? _____                  c) Is the source water groundwater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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 <input type="checkbox"/> No <input checked="" type="checkbox"/>                  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.</p>
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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  If No, explain: NO CWIS.

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 LC<sub>50</sub> in percent for aquatic organism(s)). NONE

**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 SHORTNOSE STURGEON IN CONNECTICUT RIVER IS NOT CONSIDERED "IN PROXIMITY" TO THE DISCHARGE
- b) Has any consultation with the federal services been completed? Yes \_\_\_ No X
- c) Is consultation underway? Yes \_\_\_ 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? A
- 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 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:

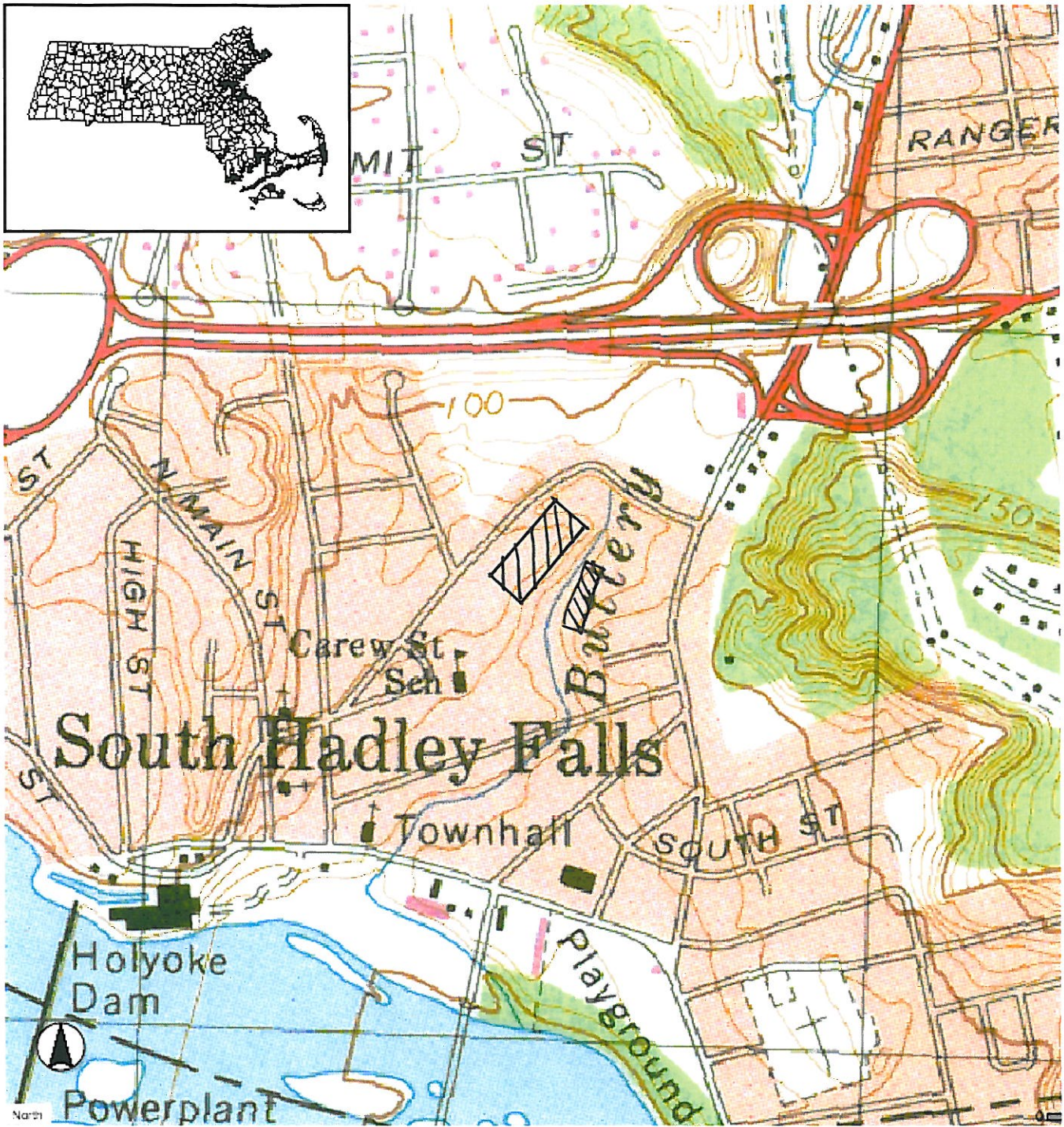
I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the noncontact cooling water (NCCW) system; (2) the discharge consists solely of NCCW (to reduce temperature) and authorized pH adjustment and/or dechlorination 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.

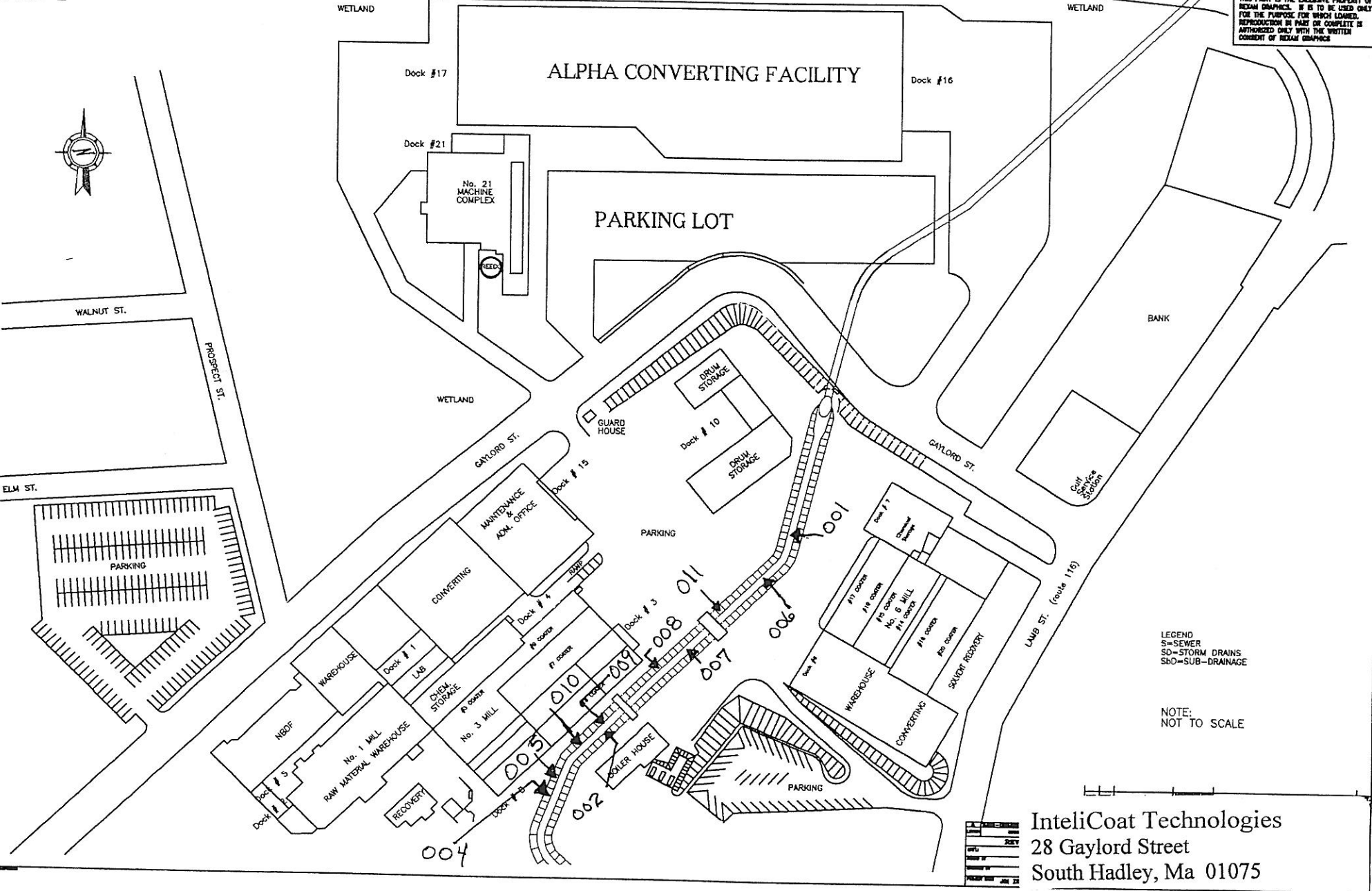
Facility Name: <i>INTELI COAT TECHNOLOGIES</i>
Operator signature: <i>SCOTT ALLEN</i> 
Title: <i>PLANT MANAGER</i>
Date: <i>10/21/08</i>

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.







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LEGEND  
 S=SEWER  
 SD=STORM DRAINS  
 S&D=SUB-DRAINAGE

NOTE:  
 NOT TO SCALE

InteliCoat Technologies  
 28 Gaylord Street  
 South Hadley, Ma 01075

DATE	2007
SCALE	
PROJECT	
DATE	JUN 22

Engineering Calculation  
For Surface Water Temperature Rise

Maximum daily flow rate from 2007 DMR based on outfalls 001A and 007A = 0.032 MGD

Assume worst case temperature rise will be in winter when Buttery Brook Temperature is at a minimum estimated at 38 °F.

7Q10 = 0.29 MGD

Maximum temperature of cooling water discharged in January is 45 °F.

Temperature rise of the brook: 0.7 °F

Cooling water will lose 6.3 °F

$$Q = mC_p\Delta T$$

$$Q = \text{Btu}$$

$$C_p = 1 \text{ Btu/lb-}^\circ\text{F}$$

$$M = \text{pounds}$$

For Cooling water:

$$Q = mC_p\Delta T = (0.032 \text{ MGD} \times 8.34 \text{ lb/gallon}) \times 1 \text{ Btu/lb-}^\circ\text{F} \times (6.3) = 1.68 \text{ million Btu given up by cooling water}$$

For brook; 1.68 million Btu absorbed

$$\Delta T = Q/mC_p = 1.68 \text{ million Btu}/(1 \text{ Btu/lb-}^\circ\text{F} \times 0.29 \text{ mgd} \times 8.34 \text{ lb/gallon}) = 0.7 \text{ }^\circ\text{F}$$