



October 3, 2008

To Whom It May Concern:

Please accept my Notice of Intent (NOI) for the Non Contact Cooling Water General Permit. At this time I am awaiting for a representative from the NOAA and Massachusetts Wildlife to provide information relative to endangered species and as a result I have indicated that consultation is underway in Section 6.

Attached to this letter is:

- Notice of Intent
- Engineering Calculations (2c)
- Transmittal Number W060960
- Topographic map including discharge points (1d)

Once I resolve the issues in Section 6 I will submit a letter indicating the results of the consultation. If you need anything further in the meantime please do not hesitate to contact me.

Regards,

Jim Ryan
VP/General Manager
Polymer Injection Molding
96 Palmer Road
Monson, MA 01057

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: Polymer Injection Molding		Type of Business: Manufacturing - Injection molding
Facility Location Address : 96 Palmer Road, Monson, MA longitude: <u>72° 18' 33" W</u> latitude: <u>42° 7' 22" N</u>	Facility SIC codes: 3089	Facility Mailing Address (if not location address) 96 Palmer Road, Monson, MA
b) Name of facility owner: Ignatius Franco		Email address of owner: pixie1@cebridge.net
Owner's Tel #: (530) 268-1542 Owner's Fax #: (530) 268-1592		Owner is (check one): 1. Federal ___ 2. State ___ 3. Tribal ___ 4. Private <input checked="" type="checkbox"/> 5. Other ___ (Describe)
Address of owner (if different from facility address) 11744 Farm Court Auburn, CA 95602		
Legal name of Operator, if not owner: <u>Polymer Corporation (dba Polymer Injection Molding)</u>		
Operator Contact Name: <u>Jim Ryan</u>		
Operator Tel Number: <u>(413) 267-5524</u> Fax Number: <u>(413) 267-3658</u>		
Operator's email: <u>jimryan@polymercorporation.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 <input checked="" type="checkbox"/> No ___ If Yes, Permit Number: <u>MAG250376</u>		
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes ___ No <input checked="" type="checkbox"/>		
3. Is the facility covered by an individual NPDES permit? Yes ___ No <input checked="" type="checkbox"/> If Yes, Permit Number ___		
4. Is there a pending application on file with EPA for this discharge? Yes <input checked="" type="checkbox"/> No ___ If Yes, date of submittal: <u>2/24/05</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: Chicopee Brook
 State Water Quality Classification: Class B Freshwater: yes Marine Water: _____

b) Describe the discharge activities for which the owner/applicant is seeking coverage: non contact cooling water for cooling of injection molds.

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 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 #1 - .09 GPD Average Flow #1 - .045 GPD
#2 - .03 GPD #2 - .03 GPM

f) What is the maximum daily and average monthly temperature of the discharge (in degrees F)? Max Temp. 68°F Average Temp. 62°F
#2 - 68°F #2 62°F

g) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 8.3 Min pH 7.5

h) FOR MASSACHUSETTS FACILITIES ONLY: Is the source water of the NCCW potable water? Yes ✓ No _____ 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 _____ and the specific months of discharge _____;
 If (I), number of days/year there is a discharge _____
72° 18' 29" 42° 7' 22" 72° 18' 30" 42° 7' 21"

j) Latitude and longitude of each discharge within 100 feet: outfall 1: long. ~~72° 18' 30"~~ lat. ~~42° 7' 21"~~; outfall 2: long. ~~72° 18' 30"~~ lat. ~~42° 7' 21"~~; 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 .5 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 ✓
 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>Town Water</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: _____</p>	<p>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 ___ 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 * DOES NOT APPLY *

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/mpdes/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

*** NOT APPLICABLE**

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 ___

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

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? 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:	POLYMER INJECTION MOLDING
Operator signature:	<i>James F. Ryan</i>
Title:	VICE PRESIDENT / GENERAL MANAGER
Date:	10/3/08

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.

Polymer Corp

MAG 250376

9/30/08

Flow 001	0.045 MGD ave	0.09 MGD max
002	0.03	0.03
	<u>0.075 MGD ave</u>	<u>0.12 MGD max</u>

At A - NCCW GP:

1/67

$$\Delta T_p = 62.3^\circ F - 40^\circ F = 22.3^\circ F$$

$$\frac{m_{p/d} \Delta T}{m_r} = \frac{0.12 \text{ MGD}}{0.8 \text{ MGD}} \times 22.3^\circ F = 3.35^\circ$$

~ 3°F

$\frac{Q_{e+Gr}}{Q_e}$

$$DF_{at \text{ max flow}} = \frac{0.12 + 0.8}{0.12} = 7.7$$

$$DF_{at \text{ ave flow}} = \frac{0.075 + 0.8}{0.075} = 11.6$$

TRC limit

$$\begin{aligned} 7.7 \times 11 \text{ ug/l} &= 85 \text{ ug/l ave} \\ 7.7 \times 19 &= 146 \text{ ug/l max daily} \end{aligned}$$

Polymex Corp MAG 250376

9/30/08

Flow 001

4/06	0.02	MGD
5/06	0.04	
6/06	0.03	
7/06	0.05	
8/06	0.06	
9/06	0.04	
1/07	0.06	
2/07	0.09	
3/07	0.84	?
4/07	0.02	
5/07	0.04	

$$\frac{1.29}{11} = 0.117$$

$$\% \text{ 3/07 } \quad 0.45 \div 10 =$$

0.045 MGD	ave flow
0.09 MGD	max flow

Temp

4/06	61.7	64.5	
5/06	59.7	62	
6/06	66.4	68	← max
7/06	64.5	67.5	
8/06	66.2	68	
9/06	67.3	68	
1/07	60.7	62.3	
2/07	55.6	59.3	
3/07	57.1	59.5	



4/07 61.7 64.5

5/07 59.7 62

$680.6 \div 11 = 61.8$

∴ Ave temp = 62 °F
max temp = 68 °F 001

TRC

ave

max

6/06

0.02 mg/l

0.02

9/06

0.02

0.02

3/07

0.02

Polymex Corp

002 Flow

6/06	0.03
9/06	0.03
3/07	<u>0.03</u>

Temp

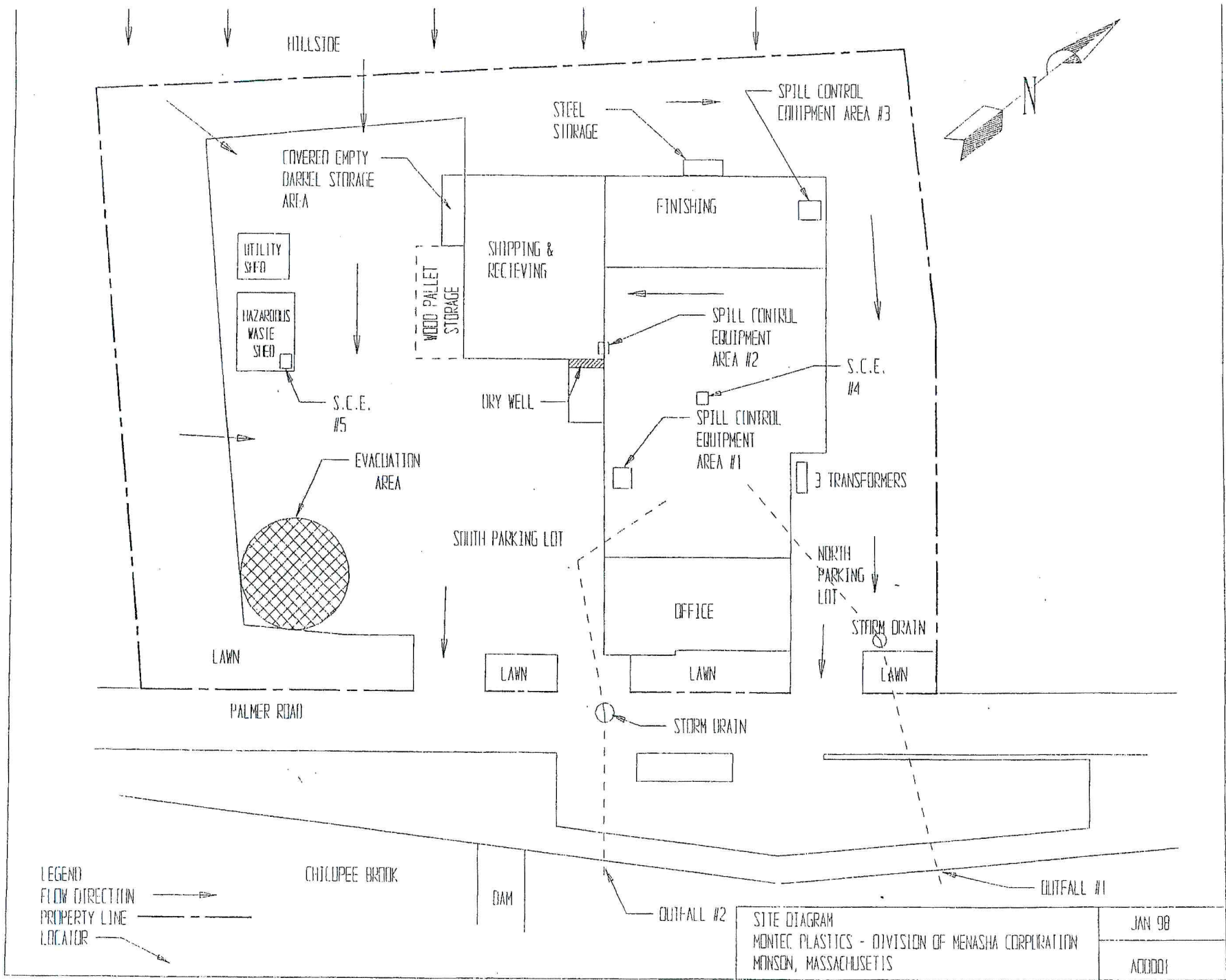
6/06	62.8	66.5
9/06	65.3	68 ← max
3/07	<u>56.8</u>	59.2

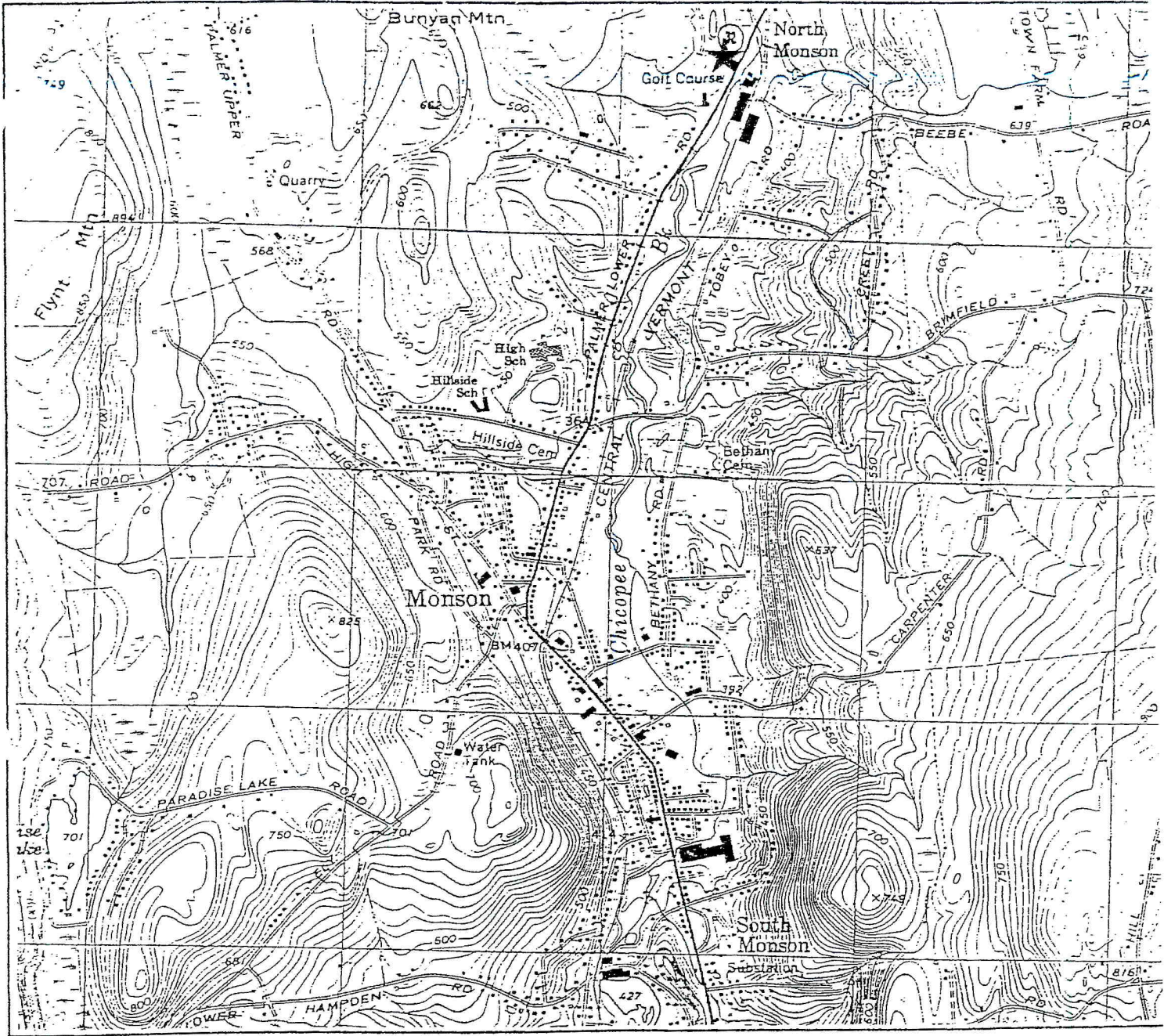
$$184.9 \div 3 = 61.6^{\circ}\text{F}$$

ave 61.6°F max 68°F

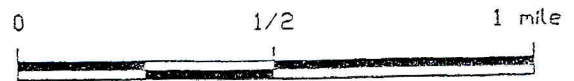
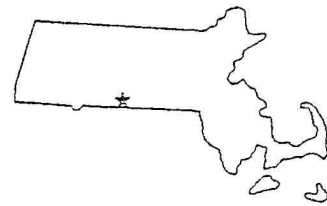
TRC

6/06	0.02	0.02
9/06	0.02	0.02
3/07	0.02	0.02





★ SITE LOCATION



SCALE

SITE LOCATION MAP
 Montec Plastics
 Monson, MA

M1809/M94-686



Environmental Services, Inc.

OCT - 9

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