

September 26, 2008

9/30/08
revised

US EPA Region 1
NCCW GP Processing
Municipal Assistance Unit (CMU),
1 Congress Street, Suite 1100
Boston, MA 02114-2023

RE: Weetabix Food Company Notice of Intent

To Whom It May Concern::

Capaccio Environmental Engineering, Inc. is submitting the enclosed Notice on Intent to discharge Noncontact Cooling Water on behalf of the Weetabix Food Company, (WEETABIX) located at 20 Cameron Street, Clinton MA. WEETABIX requests coverage under the new General Permit that became effective on August 1, 2008. WEETABIX uses municipal water as an emergency backup to a closed loop cooling water system.

If you have any questions feel free to contact me at (508) 970-0033 ext 114.

Sincerely,
Capaccio Environmental Engineering, Inc.
BY:


Lucille Servidio, CHMM, TURP
Vice President

cc: MF: 02-045 J

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: Weetabix Food Company		Type of Business: Cereal Preparations
Facility Location Address : 20 Cameron Street Clinton, MA 01510 longitude: -71.680 latitude: 42.409	Facility SIC codes: 2043	Facility Mailing Address (if not location address) same as facility location
b) Name of facility owner: Weetabix Food Company		Email address of owner: jspoon@weetabixna.com
Owner's Tel #: 978-368-0991 Owner's Fax #: 978-365-7268		Owner is (check one): 1. Federal _____ 2. State _____ 3. Tribal _____ 4. Private ☒ 4. Other _____ (Describe)
Address of owner (if different from facility address) same as facility location		
Legal name of Operator, if not owner: Weetabix Food Company		
Operator Contact Name: Jeffrey Spooner		
Operator Tel Number: 978-368-0991 Fax Number: 978-365-7268		
Operator's email: jspoon@weetabixna.com		
Operator Address (if different from owner) same as facility location		
d) Attach topographic map indicating the locations of the facility and the receiving water; all NCCW discharge points; upstream downstream monitoring points. Map attached? ☒ see appendix 1		
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: MAG250759		
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: 1/21/2005		

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

a) Name of receiving water into which discharge will occur: Nashua River, South Branch

State Water Quality Classification: Class B Freshwater: ☒ Marine Water: ☐

b) Describe the discharge activities for which the owner/applicant is seeking coverage: See appendix 2

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: ☒ see appendix 3

d) Number of outfalls 3

For each outfall: see appendix 4

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 _____ GPD Average Flow _____ GPD

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

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

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. see appendix 5

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) I
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 <1

j) Latitude and longitude of each discharge within 100 feet: outfall 1: long. _____ lat. _____; outfall 2: long. _____ lat. _____;
outfall 3: long. _____ lat. _____ (See http://www.epa.gov/tri/report/siting_tool) see appendix 4

k) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 2.64 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations. See General Permit Attachment B for equations and additional information. see appendix 5

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:

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>Wachusett Reservoir</u> 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 ☐ 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 ☒ If No, explain: The municipal water supply is the source of NCCW

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)). No pH neutralization or dechlorination chemicals are used.

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 N/A or written concurrence N/A 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 see appendix 6

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

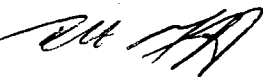
8. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

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: Weetabix Food Company

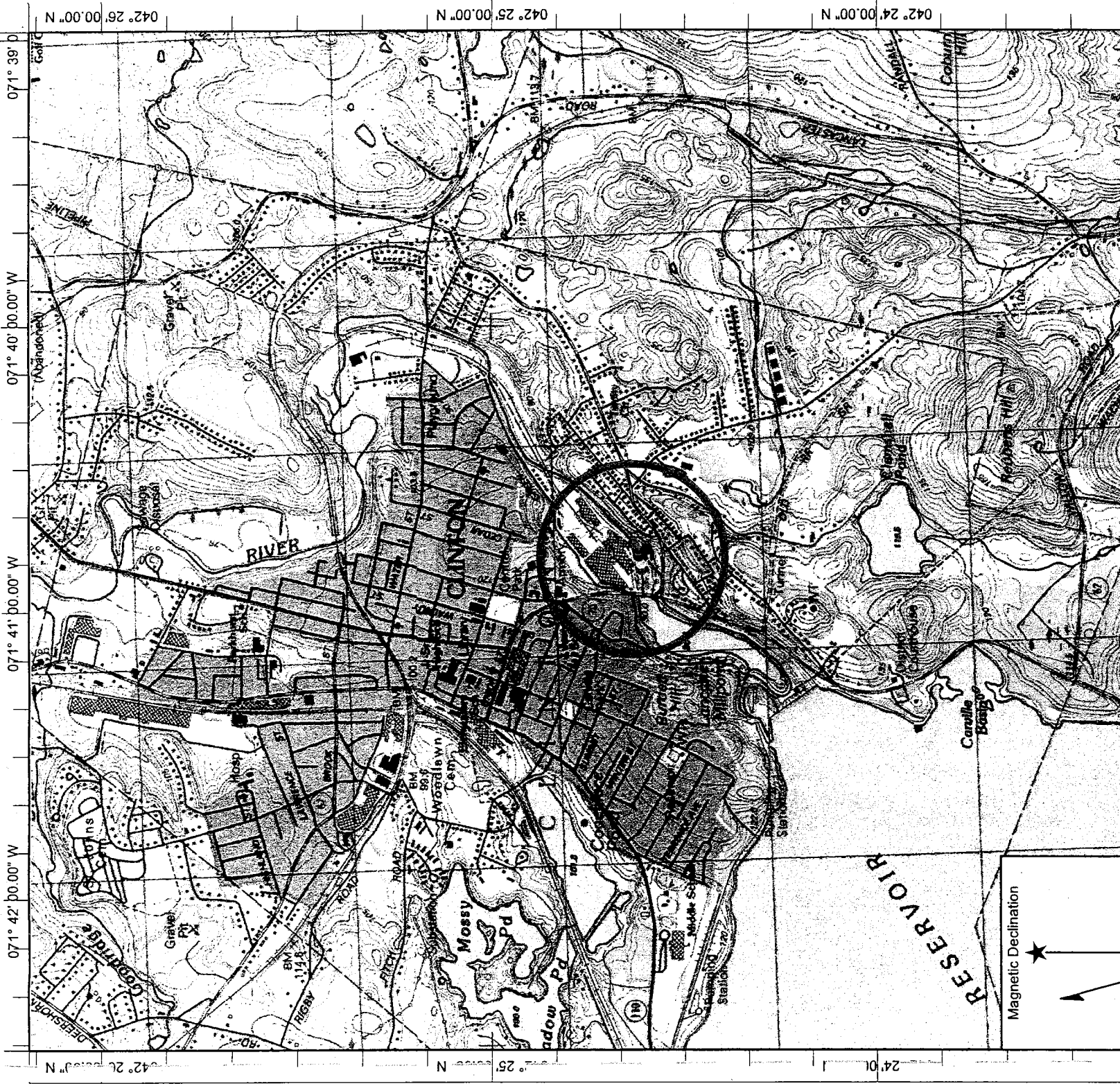
Operator signature: 

Title: VP OPERATIONS NORTH AMERICA

Date: 8-25-08

Federal regulations require this application to be signed as follows:

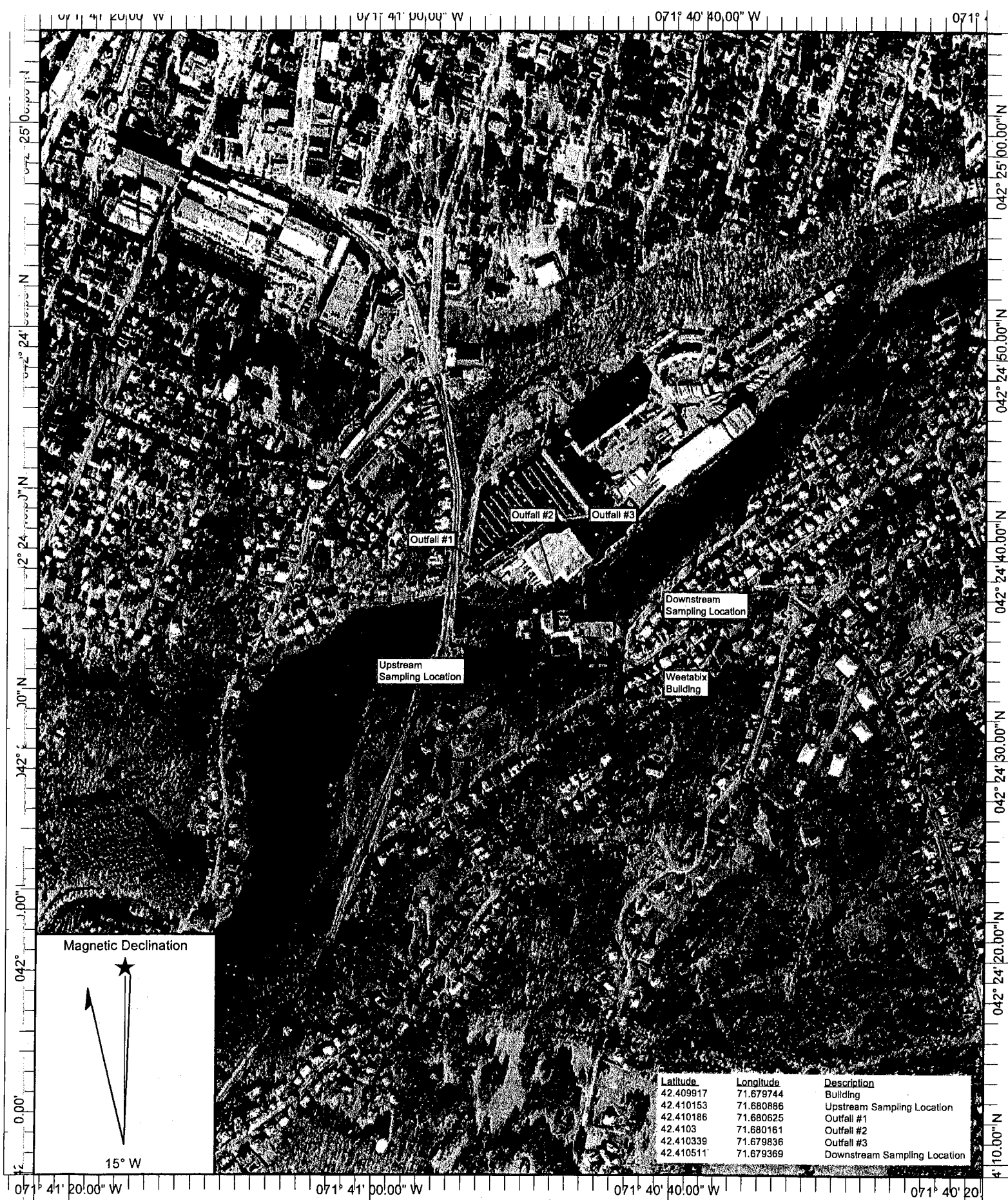
1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer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



042° 26' 00.00" N 071° 39' 00.00" W 042° 25' 00.00" N 071° 40' 00.00" W 042° 24' 00.00" N 071° 41' 00.00" W 071° 42' 00.00" W

042° 26' 00.00" N 071° 39' 00.00" W 042° 25' 00.00" N 071° 40' 00.00" W 042° 24' 00.00" N 071° 41' 00.00" W 071° 42' 00.00" W

Magnetic Declination
★



Name: CLINTON SE NW, MA
 Date: 9/24/2008
 Scale: 1 inch equals 600 feet

Building: Latitude 42.409917, Longitude 71.679744
 Caption: Figure 2 - NCCW Discharge Map
 Client: Weetabix



Notice of Intent for Noncontact Cooling Water General Permit Appendix 2

Weetabix Food Company
20 Cameron Street
Clinton, MA

Description of Discharge Activities:

The discharge of noncontact cooling water (NCCW) regulated under the General Permit is an emergency backup for the normal cooling system. The normal cooling water system is a closed loop system that cools the flaking mills and compressors in the boiler room. In the event of an emergency, municipal water can be diverted to cool the equipment. During an emergency, municipal water would not be used for cooling purposes for longer than 12 hours. Maximum and daily flows are based on municipal water being used to cool all mills and compressors for 12 hours. A description of each outfall, associated processes, and flow characteristics can be found in appendix 4. Municipal water has not been used for any cooling water purposes in the past year.

Notice of Intent for Noncontact Cooling Water General Permit Appendix 3

Weetabix Food Company
20 Cameron Street
Clinton, MA

Receiving Water Temperature Engineering Calculation:

$$\Delta T_r = (M_p / M_r) (\Delta T_p)$$

ΔT_r = Change in river temp

M_p = Mass of Effluent

M_r = Mass of River

ΔT_p = Change in temp (effluent– influent)

$$\Delta T_r = (M_p / M_r) (\Delta T_p)$$

$$\Delta T_r = (180 \text{ gpm} / 1187.5 \text{ gpm}) (73^\circ \text{ F} - 60^\circ \text{ F})$$

$$\Delta T_r = (0.151)(13)$$

$$\Delta T_r = 1.97^\circ \text{ F}$$

Notes: Volume can be substituted for mass as long as units are consistent

Mass of river determined from 7Q10

Effluent temperature determined from the average of testing done by Weetabix.

Influent temperature determined from average groundwater temperature

**Notice of Intent for Noncontact Cooling Water General Permit
Appendix 4**

Weetabix Food Company
20 Cameron Street
Clinton, MA

Outfall Description

Outfall No.	Discharge Location (See Site Plan)	Longitude	Latitude	Equipment	Flow Rate (gpm)	Average Daily Flow (gpd)	Max Daily Flow (gpd)
1	NCCW ties in with roof drains and discharges with storm water discharge system to pipe near parking lot	71.680	42.410	CS-2 Corn Mills	80	57600	57600
2	4" pipe discharging off 1st floor roof into river	71.680	42.410	CS-1 Bran Line Mill Cs-1 3rd Floor Rice Mills	80	57600	57600
3	NCCW discharges via pipe at East Wall of compressor room flows across ground to river	71.679	42.410	Compressors	20	14400	14400

Notice of Intent for Noncontact Cooling Water General Permit Appendix 5

Weetabix Food Company
20 Cameron Street
Clinton, MA

Dilution Factor:

$$\text{Dilution Factor} = \frac{[Q_r + (Q_p \times 1.55)]}{(Q_p \times 1.55)}$$

$$\text{Dilution Factor} = \frac{[2.64 \text{ cfs} + (0.129 \text{ MGD} \times 1.55)]}{0.129 \text{ MGD} \times 1.55}$$

$$\text{Dilution Factor} = (2.839/0.199)$$

$$\text{Dilution Factor} = 14.26$$

Maximum Daily Total Residual Chlorine (TRC):

$$\text{Max Daily TRC} = (\text{Dilution Factor}) \times (\text{Water Quality Criteria Class Freshwater Acute})$$

$$\text{Max Daily TRC} = (14.26)(19 \text{ ug/L})$$

$$\text{Max Daily TRC} = 270.94 \text{ ug/L}$$

Average Monthly Total Residual Chlorine (TRC):

$$\text{Average Monthly TRC} = (\text{Dilution Factor}) \times (\text{Water Quality Criteria Class Freshwater Chronic})$$

$$\text{Average Monthly TRC} = (14.26)(11 \text{ ug/L})$$

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