

Commonwealth of Massachusetts

Executive Office of Environmental Affairs ■ MEPA Office

ENF

Environmental Notification Form

<i>For Office Use Only</i> <i>Executive Office of Environmental Affairs</i>
EOEA No.: 12724R
MEPA Analyst: Nick ZAVOLAS
Phone: 617-626- 1030

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Hannegan Brook Well		
Street: Green Pond Road		
Municipality: Montague, MA	Watershed: Connecticut	
Universal Transverse Mercator Coordinates: 18 07 04 435 E 47 14 860 N	Latitude: 42° 33' 40" N	Longitude: 71° 30' 34" W
Estimated commencement date: 2003	Estimated completion date: 2004	
Approximate cost: \$750,000	Status of project design: 10%complete	
Proponent: Turners Falls Fire District		
Street: 226 Millers Falls Road		
Municipality: Turners Falls	State: MA	Zip Code: 01376
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Nicole L. Sanford, Environmental Analyst		
Firm/Agency: Dufresne-Henry	Street: 136 West Street, Suite 203	
Municipality: Northampton	State: MA	Zip Code: 01060
Phone: (413)584-4776	Fax: (413)584-3157	E-mail: nsanford@dufresne-henry.com

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes X No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) X No
- Has any project on this site been filed with MEPA before?
 Yes (EOEA No. _____) X No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8)) Yes X No
 - a Special Review Procedure? (see 301CMR 11.09) Yes X No
 - a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes X No
 - a Phase I Waiver? (see 301 CMR 11.11) Yes X No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): **No financial assistance for this project has been identified. The project will be developed with 100% local funding.**

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) X No

List Local or Federal Permits and Approvals: **Montague Planning/Zoning Review.**

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input checked="" type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input checked="" type="checkbox"/> Water Management Act Permit <input checked="" type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits (including Legislative Approvals) – Specify:
Total site acreage	100 +/-			
New acres of land altered		1 +/-		
Acres of impervious area	0	0.1	0.1	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	0	2,250	2,250	
Number of housing units	0	0	0	
Maximum height (in feet)	0	24	24	
TRANSPORTATION				
Vehicle trips per day	0	1	1	
Parking spaces	0	2	2	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	1,440,000	1,440,000	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0.5	0.5	

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

The Turner's Falls Fire District (TFFD) currently obtains water from three wells at one site. Their only emergency supply is from Lake Pleasant, an untreated surface water supply. In order to meet future water demand and to add operational flexibility and a safe backup supply, the TFFD is pursuing the development a new well site near Lake Pleasant and Hannegan Brook (Figure 1).

The Hannegan Brook site was identified for potential as a municipal water supply in 1999. Two test wells were driven in the area and then an 8-inch test well was installed after a site survey to assure the ownership of the Zone I area. The 8-inch test well is 253 feet deep and screened in fine to medium sand below a possible confining layer. All of the work being proposed is located within an upland area. Development of the well site will include improving the access way from Green Pond Road that is now a dirt path/road. Future construction will include a small pumping station building of approximately 2,250 SF. At this time the building and parking have not yet been designed. Overall, the project proposes minimal disturbances to soil and vegetation. Land altered during construction beyond the building and access road will be loamed, seeded and allowed to re-vegetate.

Regarding the well, a pump test was completed in July of 2004 by Dufresne-Henry. The proposed well is 250 feet deep with a static depth to water of about 63 feet. A 5 day pumping test was conducted at a rate of 425 GPM in May 2004. Potential impact to Hannegan Brook and Lake Pleasant was evaluated using three piezometers. The test found that there was no apparent effect on either the groundwater or surface water levels. Additional support for a lack of influence to the nearby surface water bodies comes from a comparison between the groundwater levels in the shallow and deep observation well pairs. These observation well pairs were constructed with one well screened at the same depth as the pumping well and another screened near the water table surface. The groundwater level in the deep screened well responded as expected, while the groundwater level in the shallow screened well showed no response to pumping.

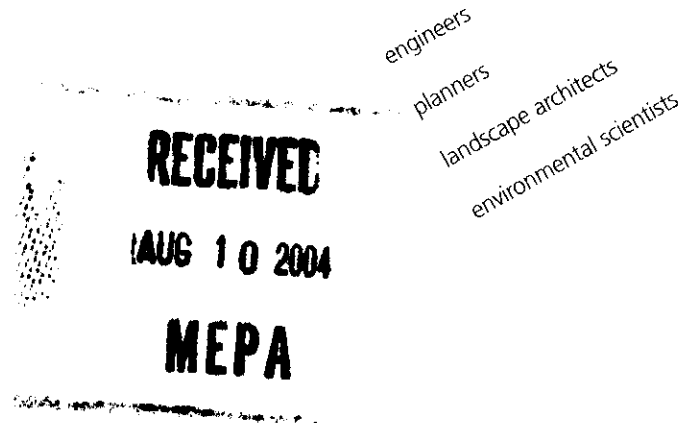
The safe yield of the site as calculated by the method described in the DEP *Guidelines and Policies for Public Water Systems* is 2,446 GPM or 3.5 MGD. Since the test was conducted at 425 GPM, the approvable yield must be limited to twice that amount, or 850 GPM. In order to achieve an approvable yield that utilizes the potential of the aquifer yet stays under the MEPA threshold of 1.5 mgd, the performance test on the final production well will be extended to 5 days to satisfy the conditions of the *Guidelines* for yield approval. The pumping rate will be 1,000 GPM to give an approvable yield of 1.44 mgd. The final design pumping rate will be 1,500 GPM which will allow up to 15 ½ hours of operation per day. Laboratory testing indicates the well yields water of good drinking water quality (*Final Report on Prolonged Pumping Test for Hannegan Brook Well* prepared by Dufresne-Henry in July of 2004).



August 4, 2004

Secretary of Environmental Affairs
Executive Office of Environmental Affairs
ATTN: MEPA Office
251 Causeway Street, Suite 900
Boston, MA 02114

**Re: Hannegan Brook Well ENF
Montague, Massachusetts
DH # 9290021**



Dear Sir or Madam:

An Environmental Notification Form (ENF) was submitted to your office for the Hannegan Brook Well in Montague, MA in February of 2002. After discussing this project with MEPA and other regulatory agencies at a site visit on March 20, 2002, it was determined that the results of a pump test were needed in order for MEPA to review the project. On March 26, 2002 the ENF was withdrawn without prejudice. Enclosed you will find a resubmission of this ENF with the requested information from a pump test that was completed at the site in July of 2004.

Per a conversation with Barbara Kehoe, Program Coordinator with MEPA, I understand that the agency correspondence from 2002 is sufficient for resubmission of the ENF. However, please note that since 2002 the Natural Heritage and Endangered Species Maps have been updated. Two years ago the project site was not located within Priority Habitat; however the 2003 map indicates that the project site is now within this area. Copies of the ENF have been mailed to the entire distribution list.

Thank you for your time and consideration. Please call our office with any questions.

Sincerely,

DUFRESNE-HENRY, INC.

A handwritten signature in black ink that reads 'Nicole Sanford'. The signature is written in a cursive, flowing style.

Nicole Sanford
Environmental Analyst

Enclosures