

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
 EOE No.: **14270**
 MEPA Analyst: **B. J. GAGE**
 Phone: 617-626-**21025**

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: Pumping Test Report Approval		
Street: off of Main Street adjacent to Cape Pond		
Municipality: Town of Rockport	Watershed: Cape Pond Watershed	
Universal Tranverse Mercator Coordinates:	Latitude: 42.64 N Longitude: 70.62 W	
Estimated commencement date: 06/09	Estimated completion date: 11/09	
Approximate cost: \$600,000.00	Status of project design: 0 %complete	
Proponent: Dewberry-Goodkind, Inc.		
Street: 280 Summer Street, 10 th Floor		
Municipality: Boston	State: MA	Zip Code: 02210
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Peter Calderazzo		
Firm/Agency: Dewberry-Goodkind, Inc.	Street: 280 Summer Street, 10 th Floor	
Municipality: Boston	State: MA	Zip Code: 02210
Phone: (617) 695-3400	Fax: (617) 695-3310	E-mail: pcalderazzo@dewberry.com

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No
- Has any project on this site been filed with MEPA before?
 Yes (EOEA No. _____) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8)) Yes No
 - a Special Review Procedure? (see 301 CMR 11.09) Yes No
 - a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No
 - a Phase I Waiver? (see 301 CMR 11.11) Yes 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):
Not applicable.

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

List Local or Federal Permits and Approvals:

BRP WS 19 Approval of Pumping Test Report for Source 70 Gallons per Minute or Greater

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 checked="" 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 <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	11.54			
New acres of land altered		.003		
Acres of impervious area	11.54	.003	11.537	
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	150	150	
Number of housing units	0	0	0	
Maximum height (in feet)	0	9	9	
TRANSPORTATION				
Vehicle trips per day	0	1	1	
Parking spaces	0	1	1	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0.4 MGD	0.4 MGD	
GPD wastewater generation/treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0.13	0.13	

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 (Specify _____) 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 Town of Rockport, Massachusetts currently relies on two surface water supplies as its major source of potable water including the Cape Pond Reservoir and the Carlson's Quarry Reservoir. In addition, the Town operates the Millbrook wellfield which is used to supplement the Cape Pond Reservoir. The Town maintains one treatment site on the northwest side of Cape Pond. Raw water supply from Cape Pond is treated at one plant through a Rapid Sand Filtration with a rated capacity of 1 million gallons per day (MGD). The raw water supply from the Carlson's Quarry is treated through a Dissolved Air Flotation plant with a rated capacity of 0.85 MGD at the plant. The Town currently has a DEP-registered maximum daily withdrawal of 0.72 MGD, or 262.8 million gallons per year. The Town's average and maximum daily demands are reported to be approximately 0.7 MGD and 1.2 MGD, respectively.

Based on current water consumption and approved withdrawals of the existing water supplies, the Town of Rockport can meet present average day demands as well as short-term periods of maximum day demands for a majority of the time. However, the Town has experienced supply problems, particularly when high demand periods have occurred concurrently with periods of minimal rainfall, which results in the surface water supplies becoming depleted, and the available yield to be reduced below the permitted withdrawals. Since the average day demands are approximately equal to the permitted withdrawals, any long-term reduction in the available supply capacity due to drought condition can put the Town's water system at risk. To improve system reliability and provide flexibility in managing supplies to meet the Town's water needs in the event of a drought condition, the Town has evaluated several alternatives including:

- Stream diversions
- The construction of the Flat Ledge Quarry Dam
- Enlargement of Cape Pond Reservoir
- The purchase of Johnson Quarry
- The development of new bedrock well source

The Town is still pursuing the construction of the Flat Ledge Quarry Dam to raise the elevation of the water level in the quarry to provide supplemental supply capacity. For the stream diversion alternative, studies have shown that this option was incapable of providing the necessary amounts of storage. This alternative was also more costly per million gallons, and construction time would be very long. For the Cape Pond Enlargement alternative, the significant costs associated with the necessary permitting and construction resulted in the Town abandoning this alternative. For the Johnson's Quarry alternative, the land is privately owned, however, the owner is willing to sell 31.5 acres including the quarry to the Town. The Town would still need to survey and take a number of unclaimed parcels surrounding the Quarry. The cost for the land, design and permitting, infrastructure to pump and transfer water from this quarry and a Stoney Brook diversion to Carlson's Quarry is the most expensive of the alternative water sources under consideration by the Town. It is still a potential alternative at this time.

The most favorable alternative which the Town is actively pursuing is the development of a new bedrock well(s) to provide additional supply. A geotechnical exploration program was conducted that identified favorable areas throughout the Town for siting and developing potential bedrock well sources. Based on the findings of the

investigations, two test well sites located approximately 500 feet to the east of Cape Pond were selected to conduct initial test drilling. The sites are on Town-owned wooded, upland parcels situated within the Cape Pond Watershed Protection Zone, resulting in less impact to private land owners, and potentially less cost to develop since minimal easements or land takings would be required for access and Zone I control. Given the close proximity of the test wells to Cape Pond, one option available to further reduce construction costs and environmental impacts is to pump the two wells directly into Cape Pond which allows the Town to maintain the volume and use of Cape Pond under minimal precipitation or drought conditions to meet water system demands.

Two 8-inch diameter test wells including RW#1 and RW#2 were drilled as part of the Test Well Program completed in May 2005 to a depth of approximately 465 feet below grade with RW#2 approximately 500 feet to the north of RW#1. The results of the Test Well Program suggested that a potential yield of approximately 300 gallons per minute(gpm) would be achievable from these test wells which met the Town's goal. Subsequently, the Town submitted a combined *Request for Site Exam and Pumping Test Proposal* to the DEP/NERO in accordance with the Guidelines and Polices for Public Water Systems dated June 6, 2006 that detailed the well site selection process, surrounding land use, conceptual Zone II delineation and prolonged pumping test proposed. Notice of this request was published in the July 2006 issue of The Environmental Monitor. The Town received approval on the submitted documentation to conduct the prolonged pumping test in March 2007.

In order to conduct the prolonged pumping test, a Notice of Intent (NOI) was filed on June 18, 2007 with the Rockport Conservation Commission for approval due to the proximity of wetlands and the proposed discharge of the pumping test adjacent to Cape Pond. An Order of Conditions was issued for the project on August 2, 2007. The prolonged pumping test was conducted in September 2007 and the Pumping Test Report required under BRP WS 19 was submitted to DEP on April 15, 2008. Based on the results of the prolonged pumping test, the Town has requested approval from the DEP to construct a new single production well at RW#2 with a future approvable yield of 282 gpm. Since the proposed project exceeds the MEPA threshold for a new water supply with a capacity of 100,000 gallons or more, this Environmental Notification Form has been submitted as required per Mass DEP BRP WS Application 19 - Pumping Test Report Approval.

The new production well to be constructed will include a pre-cast concrete building with an exterior dimension of approximately 10 feet by 15 feet to house a 50 HP submersible pump and constant speed motor, process control equipment and associated piping and valves. The building will be set on a cast-in-place concrete grade beam and will include insulated wall and roof systems, insulated door, roof hatch, heating and ventilation, electrical and lighting systems, and related work. Power will be supplied by either a portable diesel fueled emergency generator with outside enclosure sized, or permanent overhead service extended into the site from the water treatment plant. The Town is still considering both options. Based on the Town's initial intent to operate the new well supply during the Summer and early Fall months to augment their current supplies, the new well will be designed to pump directly into Cape Pond through 6-inch polyethylene hose or piping that can be installed along the ground surface to minimize construction impacts. The yield of the new well will help maintain the volume levels of Cape Pond to allow the Town to withdraw supply for meeting system demands through their existing intake on a more reliable basis. Since the planned usage of the new well will not result in any increased withdrawals under the Town's current Water Management Permit (WMP), a new permit application for an increase in water withdrawal will not be necessary. The Town will be amending their current WMP to include the final production bedrock wells as a new source.