

# ENF Environmental Notification Form

EOEA No.: 13800  
 MEPA Analyst: Bill Base  
 Phone: 617-626-1025

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: <b>Chelmsford Water Treatment Plant</b>		
Street: <b>Riverneck Road, Turnpike Road, Canal Street and Billerica Road</b>		
Municipality: <b>Chelmsford, Massachusetts</b>	Watershed: <b>Concord River Basin</b>	
Universal Tranverse Mercator Coordinates:	Latitude: <b>N 42° 36'10"</b>	Longitude: <b>W 71° 20'00.4"</b>
Estimated commencement date: <b>July 2002</b>	Estimated completion date: <b>November 2003</b>	
Approximate cost: <b>\$5,000,000.00</b>	Status of project design: <b>50%</b> complete	
Proponent: <b>Chelmsford Center Water District</b>		
Street: <b>20 Watershed Lane</b>		
Municipality: <b>Chelmsford</b>	State: <b>MA</b>	Zip Code: <b>01824</b>
Name of Contact Person From Whom Copies of this ENF May Be Obtained: <b>Randall P. Christensen; Senior Environmental Scientist</b>		
Firm/Agency: <b>Dufresne-Henry, Inc.</b>	Street: <b>278 Main Street, Suite 205</b>	
Municipality: <b>Greenfield</b>	State: <b>MA</b>	Zip Code: <b>01301</b>
Phone: <b>(413)773-3642</b>	Fax: <b>(413)774-5820</b>	E-mail: <b>rchristensen@dufresne-henry.com</b>

- 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): **There will be no financial assistance or land transfer from the Commonwealth for this project. District is seeking USDA financial assistance.**

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: **MaDEP Approval to Construct a Facility to Treat One Million Gallons per Day or Greater (BRP WS24).**

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

- Land  
 Water  
 Energy  
 ACEC
- Rare Species  
 Wastewater  
 Air  
 Regulations
- Wetlands, Waterways, & Tidelands  
 Transportation  
 Solid & Hazardous Waste  
 Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<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 type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input checked="" type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits (including Legislative Approvals) – Specify: <b>MaDEP BRP WS24</b> <b>Approval to Construct a Facility to Treat One Million Gallons per Day or Greater</b>
Total site acreage	9.7			
New acres of land altered		0.21		
Acres of impervious area	0.31	0.21	0.52	
Square feet of new bordering vegetated wetlands alteration		N/A		
Square feet of new other wetland alteration		7,325 SF Riverfront 21,450 SF BLSF 40 LF Bank		
Acres of new non-water dependent use of tidelands or waterways		N/A		
<b>STRUCTURES</b>				
Gross square footage	0	7,325	7,325	
Number of housing units	0	0	0	
Maximum height (in feet)	0	20	20	
<b>TRANSPORTATION</b>				
Vehicle trips per day	0	1	1	
Parking spaces	0	4	4	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	627,840	0	627,840	
GPD water withdrawal	627,840	0	627,840	
GPD wastewater generation/ treatment	0	90,000	90,000	
Length of water/sewer mains (in miles)	0.15	2.2 Water 0.1 Sewer	2.35 Water 0.1 Sewer	

**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.*)

This project proposes to improve the drinking water quality of the Chelmsford Center Water District's Canal Street, Riverneck Road and Turnpike Road Wells through the construction of a greensand filtration iron and manganese removal treatment plant and associated water main distribution system. The project exceeds the MEPA review threshold at 301 CMR 11.03 (4) (b) 4: construction of a new drinking water treatment plant by greater than 1MGD and 301 CMR 11.03 (3) (b) (1f): alteration of ½ or more acres of other wetlands (project will alter existing roadways that are in bordering land subject to flooding). The proposed project will improve the water quality within the water distribution system and allow the pumping of the Canal Street, Riverneck Road and Turnpike Road Wells without introducing elevated levels of iron and manganese into the distribution system. The Town of Chelmsford is located in north east Massachusetts and bordered by six towns: Westford, Tyngsborough, Lowell, Tewsbury, Billerica and Carlisle. The project site for the proposed water treatment plant is located at the existing Riverneck Road Wells site. The property is owned by the Chelmsford Center Water District. Construction of the water treatment plant will take approximately one and half years to complete.

Canal Street Wells, Riverneck Road Wells and Turnpike Road Wells all have had a history of producing water with elevated concentrations of iron and manganese that are above DEP Secondary Maximum Contaminant Levels. Canal Street Wells have an approved yield of 210 GPM, Riverneck Road Wells have an approved yield of 670 GPM and Turnpike Road Well has an approved yield of 665 GPM. In addition to greensand filtration, other methods available for iron and manganese removal are conventional treatment, sequestering and membrane filtration. Greensand filtration was selected for piloting and ultimate full-scale implementation as it has a proven ability to effectively remove high levels of iron and manganese from water at a reasonable cost. There will be no increase in water withdrawn from the site.

The proposed treatment building will be ~ 450 feet north of Riverneck Road and ~ 110 feet east of the existing pumping station. In addition to the construction of the 7,325 SF treatment building, an area of 9,275 SF will be paved with bituminous concrete to allow for four parking spaces and a 20 foot wide access road. The existing 13,400 SF paved access road will be repaved with bituminous concrete. The 90,000 GPD of backwash water from the treatment plant will be contained in a 100,000 gallon backwash holding tank. Approximately, 600 LF of sewer main will be installed and connected to an existing sewer line on Riverneck Road for the purpose of slowly draining the backwash tank. Finally, ~ 11,820 LF of new water main will be installed along Canal Street, Riverneck Road, Billerica Road and Turnpike Road to connect the treated water to the existing system. Riverneck Road contains suitable land for construction of this treatment facility, it is centrally located, has better hydraulics and has adequate space for a Water Treatment Facility therefore, it does not make sense to construct a Water Treatment Facility off-site. The treatment plant site is on forested land and is not located directly within any wetland areas. Overall, the actual alteration of the land on the 9.7 acre project site is small (0.52 acres) as it is the goal of public drinking water supplies to keep the land as natural as possible.