

*For Office Use Only*  
*Executive Office of Environmental Affairs*  
 EOE A No.: 14373  
 MEPA Analyst: Nick ZAVOLAS  
 Phone: 617-626-1030

# ENF Environmental Notification Form

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: Former Northborough Fish & Game		
Street: 119 & 167 Bearfoot Road		
Municipality: Northborough	Watershed: Concord River	
Universal Transverse Mercator Coordinates:	Latitude: 42°20'21" Longitude: -71°38'15"	
Estimated commencement date: 4/1/2009	Estimated completion date: 9/30/2009	
Approximate cost: \$1,000,000	Status of project design:	99 %complete
Proponent: Town of Northborough		
Street: 63 Main Street		
Municipality: Northborough	State: MA	Zip Code: 01532
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Arthur Allen		
Firm/Agency: EcoTec, Inc.	Street: 102 Grove Street	
Municipality: Worcester	State: MA	Zip Code: 01605
Phone: 508-752-9666, ext. 24	Fax: 508-752-9494	E-mail: aallen@ecotecinc.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): none

Are you requesting coordinated review with any other federal, state, regional, or local agency?

Yes (Specify: U.S. Army Corps, MA DEP, Local Cons. Comm.)  No

List Local or Federal Permits and Approvals: Order of Conditions; 401 Water Quality Cert.; Section 404, Category II Authorization, NPDES

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 checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input 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
<b>LAND</b>				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input checked="" 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
Total site acreage	20.5			
New acres of land altered		1.6		
Acres of impervious area		0		
Square feet of new bordering vegetated wetlands alteration		37,206		
Square feet of new other wetland alteration		2,375		
Acres of new non-water dependent use of tidelands or waterways		0		<input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits (including Legislative Approvals) – Specify: <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<b>STRUCTURES</b>				
Gross square footage	0			
Number of housing units	0			
Maximum height (in feet)				
<b>TRANSPORTATION</b>				
Vehicle trips per day	6			
Parking spaces	0			
<b>WASTEWATER</b>				
Gallons/day (GPD) of water use	0			
GPD water withdrawal	0			
GPD wastewater generation/ treatment	0			
Length of water/sewer mains (in miles)	0			

**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 \_\_\_\_\_)    **XX No**

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

Yes (Specify \_\_\_\_\_)    **XX 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 \_\_\_\_\_)    **XX 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 \_\_\_\_\_)    **XX 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.*)

(a) The subject site includes portions of a former Fish and Game Club, and two nearby properties, which were subject to a 46 year-long, sporadic discharge of Arsenic and Lead into soil and sediment from gunshot and bullets. The discharge resulted in Arsenic and Lead contamination of soil and sediment that has been determined, in accordance with the Massachusetts Contingency Plan (“MCP”) to constitute a hazard to human health and the environment. The surface of the contaminated area is comprised of approximately 1.6 acres of jurisdictional wetland resource areas and associated upland buffer zones.

(b) The remediation alternatives that are feasible for this site (based on type and concentration of hazardous materials, contaminated soil and sediment characteristics, physical site conditions and surface drainage patterns) include the following:

Monitored Natural Attenuation/ No Action Alternative – Monitored natural attenuation involves periodic evaluation of contaminant concentrations in soil, groundwater, surface water and sediment over time to assess the naturally occurring physical, chemical, and biological degradation and transport of the compounds. Given the presence of metals at the site, and their recalcitrant nature in soil and sediment, a more aggressive remedial alternative is warranted to achieve a temporary or permanent solution.

Soil Leaching with Surfactant – Soil leaching with surfactant involves the application of a surfactant that partitions contaminants from impacted soil into a soluble phase where it may be removed from the groundwater. Given the considerable volume of impacted soil, and the potential to unnecessarily degrade groundwater, this alternative is eliminated from further analysis.

Isolation via an Engineered Barrier – Pavement and other barriers, such as asphalt, concrete or building foundations, can be used to isolate oil and hazardous materials (“OHM”) in impacted surficial soils beneath an impervious surface and prevent direct contact with impacted surficial soils. The unpaved areas of the site that pose the most significant risk would be capped to prevent direct contact with impacted surficial soils. Given the considerable area of wetlands and open space use of a large portion of the disposal site, isolation via capping is not considered feasible and does not warrant further evaluation.

Solid Waste Management – Clay pigeon fragments are present on the soil surfaces, in the buffer zones, and can be raked-up and disposed of off-site at an approved solid waste facility. This remediation alternative warrants further evaluation for clean-up of solid waste at this site.

Activity and Use Limitation – An Activity and Use Limitation (“AUL”) is expected to be required to limit future site activities and uses to help achieve and/or maintain a condition of No Significant Risk. The AUL will likely be prepared based upon the assumptions used in a site-specific (Method 3) risk characterization.

Excavation, Stabilization and Off-Site Disposal with Restoration – This is the preferred remediation alternative. It would involve the dredging of contaminated sediments from streams and excavation of contaminated soils

from wetlands and buffer zones (see Appendix A for Remediation & Restoration Protocols). Dredged and excavated materials, up to 2 feet in depth would be properly de-watered, placed in an upland staging area and stabilized with phosphate binders (see Appendix C – attached), as necessary, to render them non-hazardous prior to transport to an off-site, licensed disposal facility. Excavation work within waterways will only be conducted during periods of low flow levels (i.e. July 1 to October 1). Prior to initiating sediment and soil excavation, water flowing through work areas will be re-directed, conveyed and treated so as to prevent off-site sediment and contaminant impacts. The attached Stormwater Pollution Prevention Plan and Remediation General Permit Conditions (Appendix D) provide specific control measures to be implemented.

In summary, the preferred alternatives for remediation of contaminated soil and sediment, as presented to DEP under the MCP, include excavation, stabilization and off-site disposal of up to 2 feet of soil and sediment, with restoration, plus solid waste management by surface clean-up and an Activity and Use Limitation.

(c) Following implementation of the only effective alternative (controlled removal of contaminated soils and sediment) the affected streams, wetlands and buffer zones will be fully restored according to the restoration protocol (Appendix A) and the attached site plans (Appendix I).