

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: *13110*
MEPA Analyst: *Anne Canaday*
Phone: 617-626-*1035*

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: <i>Algonquin I-2 Pipeline Cathodic Protection Ground Bed Project – Canton & Stoughton, MA</i>		
Street: <i>Algonquin I-2 Pipeline North of Willow Street in Stoughton, MA</i>		
Municipality: <i>Canton and Stoughton</i>	Watershed: <i>Neponset</i>	
Universal Transverse Mercator Coordinates: <i>UTM 19 328472E, 4669313N (NAD 27)</i>	Latitude: <i>42° 09' 33" N</i>	Longitude: <i>71° 04' 34" W</i>
Estimated commencement date: <i>11/1/03</i>	Estimated completion date: <i>Nov. 2003</i>	
Approximate cost: <i>\$80,000</i>	Status of project design: <i>100 %complete</i>	
Proponent: <i>Algonquin Gas Transmission Company (Terry Doyle, Principal Environmentalist)</i>		
Street: <i>1284 Soldiers Field Road</i>		
Municipality: <i>Boston</i>	State: <i>MA</i>	Zip Code: <i>02135</i>
Name of Contact Person From Whom Copies of this ENF May Be Obtained: <i>Rick Paquette, Wetland Biologist</i>		
Firm/Agency: <i>TRC Environmental</i>	Street: <i>Boott Mills South, Foot of John Street</i>	
Municipality: <i>Lowell</i>	State: <i>MA</i>	Zip Code: <i>01852</i>
Phone: <i>978-970-5600</i>	Fax: <i>978-453-1995</i>	E-mail: <i>rpaquette@trcsolutions.com</i>

- 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 301CMR 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): N/A

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

List Local or Federal Permits and Approvals:
401 Water Quality Certification and Category II Screening under ACOE Programmatic General Permit
Canton Conservation Commission Order of Conditions
Stoughton Conservation Commission Order of Conditions

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
LAND				<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 <input type="checkbox"/> DEP or MWRA Sewer Connection/Extension Permit <input type="checkbox"/> Other Permits (including Legislative Approvals) – Specify:
Total site acreage	0.38 acres			
New acres of land altered		0.38 acres		
Acres of impervious area	N/A	N/A	N/A	
Square feet of new bordering vegetated wetlands alteration		11,138 sq.ft.		
Square feet of new other wetland alteration		N/A		
Acres of new non-water dependent use of tidelands or waterways		N/A		
STRUCTURES				
Gross square footage	N/A	N/A	N/A	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	N/A	N/A	N/A	
TRANSPORTATION				
Vehicle trips per day	N/A	N/A	N/A	
Parking spaces	N/A	N/A	N/A	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	N/A	N/A	N/A	
GPD water withdrawal	N/A	N/A	N/A	
GPD wastewater generation/treatment	N/A	N/A	N/A	
Length of water/sewer mains (in miles)	N/A	N/A	N/A	

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 (see Attachment A)

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 (see Attachment D)

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 (see Attachment A)

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.)

Algonquin Gas Transmission Company ("Algonquin") is responsible for maintaining the safety and reliability of its natural gas pipeline systems. This includes the responsibility for providing adequate cathodic protection of Algonquin's natural gas pipeline systems through the installation of anode ground beds. Ground bed installations are typically undertaken within wetlands because of their favorable electrical conductivity. An anode bed, in conjunction with pipe coating, is the basic component of a cathodic protection system designed to limit corrosion of steel pipe and other underground metallic structures. If left unprotected, the natural electrolytic conditions in the soil will cause ions to flow away from the pipe's surface, carrying with it microscopic metal particles, causing corrosion. Cathodic protection prevents this by forcing electrical current to flow toward the pipe from the anode bed, making the pipeline a cathode, which collects or receives electrons from the soil as opposed to discharging electrons into the soil. Each installation requires electricity, a rectifier (which converts alternating current to direct current), a series of buried cables, and metallic anodes buried along the cable typically spaced every 10-20 feet.

Recent required testing of the cathodic protection levels on Algonquin's existing natural gas pipeline system has indicated that additional cathodic protection is required along this portion of the pipeline located in Canton and Stoughton, MA to meet U.S. Department of Transportation ("USDOT") regulations (Chapter 49 of the Code of Federal Regulations Section 192 Department of Transportation Regulations for "Transportation of Natural and other Gas by Pipeline," Subpart I "Requirements for Corrosion Control"). The new ground bed is necessary and designed to maintain adequate below-ground corrosion protection on Algonquin's existing I-2 gas transmission system and to ensure compliance with USDOT regulations.

The project site is located within the Towns of Canton and Stoughton, MA (see Figure 1 in Attachment A). The complete ground bed system will consist of approximately 1,280 feet of buried cable and 20 anodes. The ground bed project will begin at a new rectifier site located at an existing utility pole adjacent to the I-2 pipeline crossing of Willow Street in Stoughton, MA. The project will extend parallel and within the existing I-2 pipeline right-of-way ("ROW") for approximately 880 feet, at which point, the ground bed will be routed away in a generally perpendicular direction (east) from the existing pipeline ROW along a new easement for approximately 400 feet. The proposed work will involve temporary excavation of a narrow trench within BVW. Approximately 680 linear feet of BVW will be crossed by the proposed ground bed project (645 feet in Canton and 35 feet in Stoughton). The project will temporarily impact 11,138 square feet of bordering vegetated wetland. The project site is not located within any Natural Heritage Program estimated habitat for rare wetlands wildlife or priority habitat areas (see Figure 2 in Attachment A). No tree clearing will be required for the portion of the project along the existing maintained pipeline ROW. Algonquin also anticipates that tree clearing in the forested wetland will be minimal for the portion of the project within the new easement due to the fact that the cable does not have to be trenched in a straight line and adjustments

can be made in the field.

To provide maximum corrosion protection for the pipeline system over a large area the remote ground bed system will be installed partially within Algonquin's existing ROW and partially within a new easement that will offset the anodes approximately 190-400 feet away from the existing pipeline. The proposed project meets all the required criteria for Algonquin's ground beds in that electricity can be acquired from Willow Street, landowner conditions are favorable, and a sufficient wetland area is on-site for the installation of the ground bed. As such the proposed site will provide the level of corrosion protection necessary for the pipeline, allow continued compliance with USDOT regulations, and ensure the continued safe and reliable operation of Algonquin's gas transmission facility.

In addition to the proposed site, Algonquin evaluated four alternative ground bed sites in wetlands along this section of the I-2 pipeline in Canton and Stoughton. As previously mentioned, an acceptable ground bed site must meet a number of criteria including the presence of adequate wetland areas (i.e. minimal soil resistance), a source of electricity, and a favorable landowner agreement. None of the four alternative sites evaluated met all of these criteria. One of the alternatives was not feasible because of the existing land use and future expansion plans, and the other three sites did not have an adequate source of electricity. Therefore, the proposed ground bed site north of Willow Street is superior to the four alternative sites.

Construction is scheduled to occur during early November 2003. The cable and anodes will be installed using conventional excavation and backfilling construction methods and a narrow trench approximately 12-18 inches wide by 24-36 inches deep will be excavated. To minimize rutting within the wetland area, a small rubber tired or tracked backhoe will be used to excavate the trench. Topsoil within the wetland will be segregated from the subsoil and excavated trench spoil will be stockpiled next to the trench. The ground bed components will be installed within the trench and immediately backfilled. All contours and grades within the construction area will be returned to pre-construction condition and seeded to quickly establish vegetative cover and stabilize the work area. During excavation through the wetland resource area, Algonquin will segregate the top 12 inches of soil from the wetland subsoil, except where standing water or saturated conditions exist. Segregating and salvaging wetland topsoil will conserve the natural seed bank and root bed material that will quickly reestablish wetland vegetation cover when replaced. Wetland topsoil will be returned to original grade following installation and backfilling of the ground bed system. Backfilling and restoration of the disturbed area will take place on a daily basis, eliminating the need for stockpiling spoil overnight. Finally, all construction related debris and extra materials will be removed from the site.

Algonquin will ensure that the contractor will take all necessary precautions to prevent a spill from occurring, and to be prepared in the event that a spill occurs. Any service vehicle used to transport lubricants and fuel will be equipped with an emergency response kit. The following activities will be confined to upland areas located at least 100 feet from a wetland or watercourse:

- *Refueling equipment;*
- *storing fuels or lubricating oils; and*
- *parking vehicles and storing motorized equipment during non-work hours.*

Algonquin will have a qualified company inspector meet with the contractor prior to construction to discuss all on-site activities relative to environmental issues and permit conditions. At a minimum the company inspector will review with the contractor the location of all wetland resource areas, upland areas appropriate for refueling and equipment storage, project plans, the E&SC Plan, and the installation of any additional measures deemed necessary based on field or weather conditions. The company inspector will be present during the entire construction and installation of the new cathodic protection ground bed.