

**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.:	<u>14107</u>
MEPA Analyst:	<u>Beiona Angus</u>
Phone:	617-626- <u>1029</u>

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>Cathodic Protection System</b>		
Street: <b>Chestnut Street to Route 146A</b>		
Municipality: <b>Uxbridge, MA</b>	Watershed: <b>Blackstone</b>	
Universal Transverse Mercator Coordinates: <b>N 4656249.5 E 282612.97</b>	Latitude: <b>N 42.028250</b>	Longitude: <b>W -71.625950</b>
Estimated commencement date: <b>Fall / Winter 2007</b>	Estimated completion date: <b>Winter 2007</b>	
Approximate cost: <b>\$125,000</b>	Status of project design: <b>100 %complete</b>	
Proponent: <b>Algonquin Gas Transmission, LLC</b>		
Street: <b>890 Winter Street</b>		
Municipality: <b>Waltham</b>	State: <b>MA</b>	Zip Code: <b>02451</b>
Name of Contact Person From Whom Copies of this ENF May Be Obtained: <b>John Zimmer</b>		
Firm/Agency: <b>ENSR</b>	Street: <b>95 State Road</b>	
Municipality: <b>Sagamore Beach</b>	State: <b>MA</b>	Zip Code: <b>02562</b>
Phone: <b>508-888-3900 x 226</b>	Fax: <b>508-888-6689</b>	E-mail: <b>jzimmer@ensr.aecom.com</b>

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): None

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

Yes (Specify: )  No

List Local or Federal Permits and Approvals: **ACOE PGP II, Order of Conditions – Uxbridge Conservation Commission, MEPA Certificate; 401 WQC**

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  <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits (including Legislative Approvals) – Specify:
Total site acreage	5.45			
New acres of land altered		0		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		11,730		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage	0	0	0	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	0	0	0	
<b>TRANSPORTATION</b>				
Vehicle trips per day	N/A	N/A	N/A	
Parking spaces	N/A	N/A	N/A	
<b>WASTEWATER</b>				
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: PH1470, PH1435, WH254)  No  
PH 1196, PH 149, EH 849, & EH 574

**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.)

Algonquin Gas Transmission, LLC ("Algonquin") is proposing to install an approximately 3,168 liner-foot cathodic protection system in the vicinity of its existing underground natural gas pipelines located between Chestnut Street and Quaker Highway (Route 146A), in Uxbridge, Massachusetts. The proposed system will include a utility pole, an electric current rectifier mounted on the utility pole, and a factory packaged MATCOR linear anode system. The proposed system is to be located within Algonquin's existing permanent Right-Of-Way ("ROW") and connected to Algonquin's existing pipeline system (see Section VII).

Cathodic protection systems are necessary to prevent natural gas transmission pipelines from corroding. The U.S. Department of Transportation (USDOT) has established specific levels of cathodic protection that pipeline operators are required to maintain on their systems. The primary regulations are set forth in Chapter 49 of the Code of Federal Regulations, Section 192, USDOT Regulations for "Transportation of Natural and other Gas by Pipeline," Subpart I "Requirements for Corrosion Control".

Cathodic protection systems are typically used to protect buried steel facilities from corrosion and periodically, these systems need to be replaced or supplemented. Recent monitoring of cathodic protection levels on Algonquin's pipeline system has shown that additional cathodic protection is required between Chestnut Street and Quaker Highway (Route 146A) to protect the existing pipelines. The proposed system has been designed to increase the cathodic protection levels on the pipeline system in this area and will maintain the pipelines in accordance with USDOT regulations.

The proposed cathodic protection system will be constructed in the vicinity of Algonquin's existing underground natural gas pipelines located between Chestnut Street and Quaker Highway (Route 146A) in Uxbridge, Massachusetts (see Section III, Figure 1). The site currently contains an existing 75-foot wide Algonquin ROW, and existing 24-inch and 30-inch diameter natural gas pipelines. Algonquin maintains

the pipeline ROW on a regular basis in an herbaceous/scrub shrub cover for operational and monitoring purposes.

Possible alternatives to the proposed project are limited because cathodic protection systems are the only means of providing increased cathodic protection. Siting of cathodic protection systems must include connection to the pipeline, a power source and proximity to the general location of where the increased protection is needed. Also, cathodic protection systems are generally wetland dependent facilities because of their need to be located in saturated conditions.

For the reasons cited below, Algonquin believes that the preferred alternative is the only feasible and prudent alternative that achieves the project objectives.

## **NO BUILD**

The proposed cathodic protection system will provide significant benefit to the public by maintaining safe and reliable natural gas transmission to local markets. Algonquin's existing pipeline system must continue to remain reliable to meet demand, maintain uninterrupted service and remain in compliance with USDOT regulations. The No Build Alternative will not meet the project purpose of providing adequate cathodic protection on the pipeline system to meet USDOT regulations and ensure the continued safe operation of the pipelines. Therefore, the No Build Alternative is not a feasible option.

## **LOCALIZED CATHODIC PROTECTION SYSTEM WITHIN THE EXISTING ROW (PREFERRED ALTERNATIVE)**

The preferred alternative involves installing an approximately 3,168-foot long cathodic protection system within the existing maintained ROW to achieve the project objective of increasing cathodic protection levels on the pipeline system to meet federal regulations. The Federal Energy Regulatory Commission recognizes that siting of ancillary pipeline facilities within existing rights-of-way minimizes impacts to unaltered areas.

Constructing the cathodic protection system within the existing maintained ROW would significantly reduce impacts to adjacent forested areas. The conditions found within the ROW permit the system to operate in permanently saturated medium. The placement of the cathodic protection system in and near wetlands is an important design element associated with this type of facility. The cathodic protection system must be designed with low resistance to the ground to avoid high voltage gradients in surrounding soils. To achieve this affect, the cathodic protection system is usually located in or adjacent to wetland areas, where the ground has low electrical resistance because of the saturated soils.

The preferred alternative was determined to be superior to the No-Build alternative. The preferred alternative would increase cathodic protection levels where needed, which the No-Build Alternative does not. It also allows the installation of the cathodic protection system within an existing maintained ROW, which reduces resource area impacts, construction costs and time.

The open cut method of cathodic protection installation will temporarily impact bordering vegetated wetlands. The disturbed areas will be fully restored to pre-project conditions, following the installation of the cathodic protection system. Algonquin understands the sensitive nature of the project area and will require the contractor to use all appropriate measures to the impact on wetland system. Algonquin shall conduct the proposed work in accordance with their Erosion and Sedimentation Control-Best Management Practices Work Plan and standards for work within wetlands.