

MAG-910227

CH2M HILL

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**CH2MHILL**

May 12, 2006

US Environmental Protection Agency  
RGP-NOC Processing  
Municipal Assistance Unit (CMU),  
1 Congress Street, Suite 1100  
Boston, MA 02114-2023

Subject: Notice of Intent NPDES Remediation General Permit

Dear Sir/Ma'am:

On behalf of Algonquin Gas Transmission, LLC (Algonquin), CH2M HILL submits this Notice of Intent for National Pollutant Discharge Elimination System Remediation General Permit to conduct a hydrostatic test of approximately 1700 linear foot (lf) of new 26-inch natural gas pipeline located in Medford, Massachusetts.

A pressure test of the replacement section of pipeline will be performed upon completion of construction activities. The section of pipeline to be tested will consist of new pipe and therefore will be contaminant free. Algonquin estimates needing approximately 45,100 gallons of water for the hydrostatic test for the 1700 foot replacement section of 26-inch pipe. Currently, Algonquin anticipates obtaining the necessary volume of water from the Mystic River near the upstream tie in. A second and less likely possibility is the use of municipal water from a fire hydrant. Test water from this pressure test will be discharged to a nearby stormwater drain that drains to the Mystic River or directly to the Mystic River in accordance with Algonquin's Erosion and Sediment Control Plan (ESCP). The ESCP is a component of the project's Stormwater Pollution Prevention Plan and is enclosed for your reference. Discharge water will be directed to an energy dissipation and treatment device constructed of straw bales (see Section 3.5.9 and Figures 18 and 19 of the ESCP).

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If you have any questions or require any further information, please contact me at (617) 523-2002, ext. 298.

Sincerely,

CH2M HILL



Michael L. Stoltzfus, P.W.S.  
Associate Scientist

Enclosures: U.S.G.S. Site Location Map  
Notice of Intent for the Remediation General Permit  
11 x 17 Project Plans  
Stormwater Pollution Prevention Plan  
Agency Correspondence

EPA NOI RGP.doc

cc: Bob Kubit, MADEP  
Medford Municipal Clerk's Office  
Terry Doyle, Algonquin  
Bernard Holcomb/PHL

**Notice of Intent for the  
Remediation General Permit**

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**B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit**

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**1. General site information.** Please provide the following information about the site:

a) Name of facility/site: J-System Line J-1 Replacement Project		Facility/site address: Adjacent to Mystic Valley Parkway, Medford, MA		
Location of facility/site: longitude: _____ latitude: _____ 42°25'04" / 71°06'45"	Facility SIC code(s): 4923	Street: Adjacent to Mystic Valley Parkway		
b) Name of facility/site owner: Algonquin Gas Transmission, LLC		Town: Medford		
Email address of owner: twdoyle@duke-energy.com		State: MA	Zip: 02155	County: Middlesex
Telephone no. of facility/site owner: (617) 560-1417		<b>Owner is (check one):</b> 1. Federal ___ 2. State/Tribal ___ 3. Private <input checked="" type="checkbox"/> 4. other, if so, describe:		
Fax no. of facility/site owner: (617) 560-1505				
Address of owner (if different from site):				
Street: 890 Winter Street, Suite 300				
Town: Waltham	State: MA	Zip: 02451	County: Middlesex	
c) Legal name of operator: Algonquin Gas Transmission, LLC		Operator telephone no: (617) 560-1417		
		Operator fax no.: (617) 560-1505	Operator email: twdoyle@duke-energy.com	
Operator contact name and title: Terry Doyle, Principal Environmentalist				

Address of operator (if different from owner):		Street:	
Town:	State:	Zip:	County:
d) Check "yes" or "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Yes ___ No <input checked="" type="checkbox"/> , if "yes," number: 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes ___ No <input checked="" type="checkbox"/> , if "yes," date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes ___ No <input checked="" type="checkbox"/> 4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes ___ No <input checked="" type="checkbox"/>			
e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ___ No <input checked="" type="checkbox"/> If "yes," please list: 1. site identification # assigned by the state of NH or MA: 2. permit or license # assigned: 3. state agency contact information: name, location, and telephone number:		f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number: 2. phase I or II construction storm water general permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number: 3. individual NPDES permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number: 4. any other water quality related permit? Y ___ N <input checked="" type="checkbox"/> , if Y, number:	

**2. Discharge information.** Please provide information about the discharge, (attaching additional sheets as needed) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage: Algonquin Gas Transmission, LLC is requesting authorization under the NPDES Remediation General Permit for the discharge of approximately 45,100 gallons of test water associated with a proposed hydrostatic test of a 1,700 foot section of new natural gas pipeline.		
b) Provide the following information about each discharge:	1) Number of discharge points: 1	2) What is the <b>maximum</b> and <b>average flow rate</b> of discharge (in cubic feet per second, ft <sup>3</sup> /s)? Max. flow <u>0.54</u> Average flow <u>0.54</u> Is maximum flow a <b>design value</b> ? Y ___ N <input checked="" type="checkbox"/> For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.
3) Latitude and longitude of each discharge within 100 feet: pt.1: long. <u>71.06</u> lat. <u>42.25</u> ; pt.2: long. _____ lat. _____; pt.3: long. _____ lat. _____; pt.4: long. _____ lat. _____; pt.5: long. _____ lat. _____; pt.6: long. _____ lat. _____; pt.7: long. _____ lat. _____; pt.8: long. _____ lat. _____; etc.		

4) If hydrostatic testing, total volume of the discharge (gals): 45,100	5) Is the discharge intermittent <input checked="" type="checkbox"/> or seasonal _____? Is discharge ongoing    Yes _____ No <input checked="" type="checkbox"/> ?
c) Expected dates of discharge (mm/dd/yy): start <u>07/05/06</u> end <u>08/29/06</u>	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).	

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for all of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids	✓									
2. Total Residual Chlorine	✓									
3. Total Petroleum Hydrocarbons	✓									
4. Cyanide	✓									
5. Benzene	✓									
6. Toluene	✓									
7. Ethylbenzene	✓									
8. (m,p,o) Xylenes	✓									
9. Total BTEX <sup>4</sup>	✓									

<sup>4</sup>BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)	✓									
11. Methyl-tert-Butyl Ether (MtBE)	✓									
12. tert-Butyl Alcohol (TBA)	✓									
13. tert-Amyl Methyl Ether (TAME)	✓									
14. Naphthalene	✓									
15. Carbon Tetra-chloride	✓									
16. 1,4 Dichlorobenzene	✓									
17. 1,2 Dichlorobenzene	✓									
18. 1,3 Dichlorobenzene	✓									
19. 1,1 Dichloroethane	✓									
20. 1,2 Dichloroethane	✓									
21. 1,1 Dichloroethylene	✓									
22. cis-1,2 Dichloro-ethylene	✓									
23. Dichloromethane (Methylene Chloride)	✓									
24. Tetrachloroethylene	✓									

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓									
26. 1,1,2 Trichloroethane	✓									
27. Trichloroethylene	✓									
28. Vinyl Chloride	✓									
29. Acetone	✓									
30. 1,4 Dioxane	✓									
31. Total Phenols	✓									
32. Pentachlorophenol	✓									
33. Total Phthalates <sup>5</sup> (Phthalate esthers)	✓									
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓									
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓									
a. Benzo(a) Anthracene	✓									
b. Benzo(a) Pyrene	✓									
c. Benzo(b)Fluoranthene	✓									
d. Benzo(k) Fluoranthene	✓									
e. Chrysene	✓									

<sup>5</sup>The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	✓									
g. Indeno(1,2,3-cd) Pyrene	✓									
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✓									
h. Acenaphthene	✓									
i. Acenaphthylene	✓									
j. Anthracene	✓									
k. Benzo(ghi) Perylene	✓									
l. Fluoranthene	✓									
m. Fluorene	✓									
n. Naphthalene-	✓									
o. Phenanthrene	✓									
p. Pyrene	✓									
37. Total Polychlorinated Biphenyls (PCBs)	✓									
38. Antimony	✓									
39. Arsenic	✓									
40. Cadmium	✓									
41. Chromium III	✓									
42. Chromium VI	✓									

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper	✓									
44. Lead	✓									
45. Mercury	✓									
46. Nickel	✓									
47. Selenium	✓									
48. Silver	✓									
49. Zinc	✓									
50. Iron	✓									
Other (describe):										

c) For discharges where **metals** are believed present, please fill out the following:

<p><i>Step 1:</i> Do any of the metals in the influent have a <b>reasonable potential</b> to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y ___ N ___</p>	<p>If yes, which metals?</p>
<p><i>Step 2:</i> For any metals which have <b>reasonable potential</b> to exceed the <b>Appendix III</b> limits, calculate the <b>dilution factor (DF)</b> using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metals: _____ DF: _____</p>	<p>Look up the limit calculated at the corresponding dilution factor in <b>Appendix IV</b>. Do any of the metals in the <b>influent</b> have the potential to exceed the corresponding <b>effluent</b> limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ___ N ___ If "Yes," list which metals:</p>

**4. Treatment system information.** Please describe the treatment system using separate sheets as necessary, including:

<p>a) A description of the treatment system, including a schematic of the proposed or existing treatment system:                  Discharge will occur within an energy dissipating and treatment structure constructed of straw bales. See Figure 18 (attached).</p>						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank	Air stripper	Oil/water separator	Equalization tanks	Bag filter	GAC filter
	Chlorination	Dechlorination	Other (please describe): Straw bale structure.			
<p>c) Proposed <b>average</b> and <b>maximum flow rates</b> (gallons per minute) for the discharge and the <b>design flow rate(s)</b> (gallons per minute) of the treatment system:                  Average flow rate of discharge <u>200</u>      Maximum flow rate of treatment system <u>&gt;200</u>      Design flow rate of treatment system <u>&gt;200</u></p>						
<p>d) A description of chemical additives being used or planned to be used (attach MSDS sheets):                  Not applicable.</p>						

**5. Receiving surface water(s).** Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct <input checked="" type="checkbox"/>	Within facility <input checked="" type="checkbox"/>	Storm drain <input type="checkbox"/>	River/brook <input type="checkbox"/>	Wetlands <input type="checkbox"/>	Other (describe):
<p>b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:                  Test water from the hydrostatic test will be discharged to upland area adjacent to Mystic River. Receiving area will include an energy dissipating structure located within a straw structure (see Figure 18).</p>						

<p>c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:</p> <p>1. For multiple discharges, number the discharges sequentially.</p> <p>2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water</p> <p>The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.</p>
<p>d) Provide the state water quality classification of the receiving water <u>B</u>,</p>
<p>e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water <u>n/a</u> cfs</p> <p>Please attach any calculation sheets used to support stream flow and dilution calculations.</p>
<p>f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes ___ No <input checked="" type="checkbox"/> If yes, for which pollutant(s)?</p> <p>Is there a TMDL? Yes ___ No <input checked="" type="checkbox"/> If yes, for which pollutant(s)?</p>

**6. Results of Consultation with Federal Services:** Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

<p>a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes ___ No <input checked="" type="checkbox"/></p> <p>Has any consultation with the federal services been completed? <input checked="" type="checkbox"/> No ___ or is consultation underway? Yes ___ No ___</p> <p>What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):</p> <p>a “no jeopardy” opinion? ___ or written concurrence <input checked="" type="checkbox"/> on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?</p>
<p>b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?</p> <p>Yes ___ No <input checked="" type="checkbox"/> Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes <input checked="" type="checkbox"/> No ___</p>

**7. Supplemental information. :**

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

The proposed 1700 foot section will replace an existing section of natural gas pipeline. The pipe will be new and therefore no contaminants are anticipated to be introduced to water used for this hydrostatic test. It is expected that source water for the test will come from the Mystic River with an intake located near the upstream tie-in.

**8. Signature Requirements:** The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

Facility/Site Name: J-System Line J-1 Replacement Project

Operator signature: 

Title: LEAD TECHNICAL SPECIALIST

Date: 4/25/06