Special Conditions for
Algonquin Gas Transmission Company
NYSDEC Certificate to Operate
Emission Points R0100, R0200, R0300, and R0400

I. Emission Limits

1. Total Nitrogen Oxide (NOx) emissions from all of the combustion sources at the station (existing emission points R0100, R0200, R0300, R0400, GT020, and 00006 and new emission point 00GT7) must not exceed 420 tons per year. A 52 week rolling total must be calculated and reported monthly by Algonquin Gas Transmission Company (Algonquin) to the Department as described in detail in Algonquin's "NOx Emission Cap Formula" document (attached to these special conditions) submitted with the permit applications and adjusted to incorporate weekly totalling.

II. Operating Requirements

1. Natural Gas shall be the only fuel used in the combustion sources.

III. Testing Requirements

1. Testing to verify the NOx emission factor used in the Emissions Cap Formula must be performed. This testing must be performed when the required testing for Emission Point 00GT7 is conducted.

2. The engines will be stack tested according to 40 CFR 60.8 and 6 NYCRR Part 202.

4. All testing must be done in accordance with protocols approved by NYSDEC in advance of testing. Protocols must be submitted for approval at least 60 days in advance of testing. NYSDEC must be provided with at least 30 days advanced notice of testing. Failure to notify or use approved protocols is grounds for rejection of such tests.

IV. Compliance Certification

1. NYSDEC reserves the right to require stack testing of facility emissions in order to determine compliance with the limits set forth in this permit if NYSDEC has cause to believe that the facility is in non-compliance. In such a case, NYSDEC will provide written documentation to Algonquin Gas Transmission Company describing the reason(s) for suspecting facility non-compliance. Testing required must be conducted within the time frame set forth by NYSDEC.

2. NYSDEC reserves the right to inspect this facility as deemed necessary to determine compliance with this permit. Such inspections may be performed without prior notification by NYSDEC. Routine inspections will be made during reasonable business hours, however, NYSDEC reserves the right to enter the facility at any time if there is cause to believe that the facility is in non-compliance.

3. All testing must be done in accordance with protocols approved by NYSDEC in advance of testing. Protocols must be submitted for approval at least 60 days in advance of testing. NYSDEC must be provided with at least 30 days advanced notice of testing. Failure to notify or use approved protocols is grounds for rejection of such tests.

V. Record Keeping and Reporting

1. A weekly rolling annual amount of fuel burned in the engines must be maintained in accordance with permit condition I.1. The total fuel burned per calendar year must be reported for each calendar year.

2. All copies of reports and notification required under this section must be submitted to the NYSDEC Region 3 Office, with two copies sent to the NYSDEC Bureau of Source Control in Albany. Unless stated otherwise, such reports or notification shall be submitted within thirty days after the end of each calendar year quarter. The addresses for the above offices are as follows:

NYSDEC Region 3 Office
Attn: Air Quality Engineer
21 South Putts Corner Road
New Paltz, NY 12561-1696

NYSDEC
Bureau of Source Control
50 Wolf Road
Albany, NY 12233-3254.

3. All records required by this permit must be kept at the facility for the three most recent years, and must be made available upon request of a NYSDEC authorized agent except for the total fuel burned per calendar year which must be kept for five most recent years.

4. A summary of the emission limits and operating restrictions of this permit must be posted in the control room of the facility and must be plainly visible (without obstructions) to the operator of the facility. A copy of this summary shall be submitted to NYSDEC prior to facility startup and is subject to NYSDEC approval.

VI. Compliance

1. Any violation of the conditions of this permit is subject to enforcement action under Article 71 of the New York State Environmental Conservation Law.

ATTACHMENT 1

Annual NOx Emissions Cap Formula

The following general formula will be used to develop Algonquin's monthly monitoring report to the NYSDEC. NOx emissions for the month preceding the report submittal month will be calculated for each engine. The total of emissions from all engines will be the weekly NOx emissions for the 52 weeks preceding the report month. The total emissions for the preceding 52 weeks will be shown on the report. Fuel heat value and fuel consumed by each engine will be reported as well.

The formula is as follows:

$T_{STATION} = T_{Clarks} + T_{Centaurs} + T_{Mars} < 421$ Tons NOx/Year

$T_{year} = \Sigma$ (T_{week} for most recent 52 weeks) < 421 Tons NOx/Year

$T_{week} = \Sigma$ ($P_{unit} * F$) / (2000 Pounds/Ton) = Tons/Week

Where:

T = NOx Tons/time (week or year)

P_{unit} = NOx Pounds/mmBTU for the natural gas used as fuel

Unit = Mars = 0.65 Pounds/mmBTU max
Centaurs = 0.38 Pounds/mmBTU max
Clarks = 5.25 Pounds/mmBTU max

F = mmBTU/week

Fuel heat value = 1031 BTU/SCF

New York State Department of Environmental Conservation
21 South Putt Corners Road, New Paltz, NY 12561-1696
(914) 256-3000 FAX (914) 255-3042

Michael D. Zagata
Commissioner

August 8, 1996

TERRANCE W DOYLE
ALGONQUIN GAS TRANSMISSION CO
1284 SOLDIERS FIELD ROAD
BOSTON MA 02135

RE: Permit No. 3-3928-00001/00010, 11, 12, 13
Town of Stony Point, Rockland County
Stony Point Compressor Station
Emission Points R0100, R0200, R0300, R0400

PERMIT CORRECTION

Dear Mr. Doyle:

The above permits are hereby corrected as follows: The last sentence in Special Condition 3, within section IV. Compliance Certification, is completed to read: "The name(s) of vendors which can independently verify the testing or engineering evaluation must also be supplied to the Commissioner's representative."

All other terms and conditions remain as written in the permits as last revised March 29, 1996. Please attach a copy of this modification to the front of each permit.

If there are any questions please contact me at (914) 256-3014.

Very truly yours,

Alexander F. Ciesluk, Jr.

Alexander F. Ciesluk, Jr.
Deputy Regional Permit Administrator
Region 3

AFC/ma
Enc.
cc: R. Stanton/J.Battista
P. Lentlie
T. Gardella,USEPA

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STATIONARY COMBUSTION INSTALLATION

APPLICATION FOR PERMIT TO CONSTRUCT OR CERTIFICATE TO OPERATE

DEC LOCATION / FACILITY / EMISSION POINT: 3 9 2 8 0 0 0 7 3 1 R 0 1 0 0

JAN 25 1991

SECTION A

Field	Entry
Name of owner / firm	Algonquin Gas Transmission Co.
Number and street address	1284 Soldiers Field Road
City / Town / Village	Boston
State	MA
Zip	02135
Owner classification	Industrial
Name and title of owner's representative	Timothy C. O'Brien, Manager Environ. Compliance
Telephone	(617) 560-1402
Name of authorized agent	ENSR Consulting & Engineering
Telephone	(508) 635-9500
Number and street address	35 Nagog Park
City / Town / Village	Acton
State	MA
Zip	01720
Name of P.E. or architect preparing plans	Robert G. McInnes
N.Y.S. P.E. or architect license no.	054089-1
Telephone	(508) 635-9500
Facility name if different from owner/firm	Stony Point Compressor Station
Facility location (number and street address)	Lindberg Road
City / Town / Village	Stony Point
Zip	10980
Building name or number	Compressor Bldg.
Start up date (mo/yr)	7/91
Drawing numbers of plans submitted	SK-1047-005; S-1480-051
Certificate to operate	Modification

SECTION B

Emission point ID	Ground elevation (ft)	Height above structure (ft)	Stack height (ft)	Inside dimensions (in)	Exit temperature (°F)	Exit velocity (ft/sec)	Exit flow (ACFM)	Heat input (million Btu/hr)	Continuous monitors
R0100	290	18	49	39	845	104	28,800	18.9	

SECTION C

Unit type	Unit manufacturer's name and model number	Unit heat input	Air intake	Source code
07	Clark TLA-8	18.9		A7410

Burner type	No. of burners	Burner manufacturer's name and model number	Fuel type	Avg. quantity of fuel / hr	Max. quantity of fuel / hr	Quantity of fuel / yr
NA	NA	NA	52	18,657	18,657	*
NA	NA	NA	NA	NA	NA	NA

Hrs/day	Days/year	% operation by season: Winter	Spring	Summer	Fall	Name of supplier(s)
*	*	25	25	25	25	Algonquin Gas Transmission Co.
NA	NA			NA		NA

SECTION D

Emission control equip. I.D.	Control type	Manufacturer's name and model number	Disposal method	Date installed (mo/yr)	Useful life
NA	99	NA	NA	NA	NA
NA	99	NA	NA	NA	NA

SECTION E

CALCULATIONS
See Attachments A & B

SECTION F

TO BE COMPLETED FOR ALL SOURCES USING ITEM 52 AND OTHER SOURCES AS DEFINED IN THE INSTRUCTION FORM 76-17-4

Contaminant name	CAS number	Emissions: Actual	Unit	How det.	Permissible	% Control efficiency	Hourly emissions (lbs/hr): Actual	Annual emissions: Actual	10[x]	Permissible
Total particulates	[illegible]	Negligible				0	Negligible			
Sulfur dioxide	[illegible]	5.2x10	11	9	**	0	0.001	*		
Nitrogen oxides	[illegible]	5.26	11	9	***	0	99.4	*		
Carbon Monoxide	630-08-0	1.43	11	9	***	0	27.1	*		
Hydrocarbons	72-82-8	0.68	11	9	***	0	12.9	*		

[Upon completion of construction sign and ...] THE STATIONARY COMBUSTION INSTALLATION HAS BEEN CONSTRUCTED AND WILL BE OPERATED IN ACCORDANCE WITH STATED SPECIFICATIONS AND IN CONFORMANCE WITH ALL PROVISIONS OF EXISTING REGULATIONS.

Signature of authorized representative or agent: [signature] Date: 1/23/91

AGENCY USE ONLY

Location code	Facility ID no.	U.T.M. (E)	U.T.M. (N)	DEC number	Date appl. received	Date appl. reviewed	Reviewed by
392800	0731	5820	5658	49 ZZ	/ /	9/23/91	ZM

PERMIT TO CONSTRUCT

Date issued	Expiration date	Signature of approval	Fee
/ /	/ /		

1. DEVIATION FROM APPROVED APPLICATION WILL VOID THIS PERMIT
2. THIS IS NOT A CERTIFICATE TO OPERATE
3. TESTS AND/OR ADDITIONAL EMISSION CONTROL EQUIPMENT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE TO OPERATE

RECOMMENDED ACTION RE: C.O.

Date issued	Expiration date	Signature of approval	Fee
9/23/91	9/23/96	[signature]	$0.

1. ☐ INSPECTED BY ______ DATE ______
2. ☐ INSPECTION DISCLOSED DIFFERENCES AS BUILT VS. PERMIT, CHANGES RECORDED ON FORM
3. ☐ ISSUE CERTIFICATE TO OPERATE FOR SOURCE
4. ☐ APPLICATION FOR C.O. DENIED ______ DATE ______ INITIALED

SPECIAL CONDITIONS:
1. See attached regarding PSD Conditions, NOx emission not to exceed 458 TPY.
2. Stack test required. [illegible]

* See "Emissions Cap Formula, Stony Point Compressor Station" (1/91 Att)
** Previously Permitted Value
*** Manufacturer's expected emissions

76-19-3 (9/85)

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0100
DATE: March 18, 1996

I. Emission Limits.

1. Emission Point **R0100**
Clark TLA-8 Reciprocating Engine

Emission Limits during Gas Firing:

NOx: 5.1 grams NOx per Brake horsepower hour

CO: 27.1 pounds per hour - [note: based on old PSD limits]

VOC: 12.9 pounds per hour - [note: based on old PSD limits]

2. These limits apply at all loads of operation, except during periods of start-up, malfunctions (as stated in the paragraphs of subdivision 6NYCRR Part 201.5 (d)) and shutdown (not to exceed three hours per occurrence).

3. All emission limits are based on the higher heating value (HHV) of the fuel being burned.

II. Operating Limits

1. The Reciprocating Engine shall fire only natural gas.

2. This emission point **R0100** shall continue to be subject to the facility wide NOx cap of **293** tpy as calculated in ATTACHMENT I.

III Testing Requirements

1. Stack testing for emissions of NOx, CO, and VOC's is required from the Reciprocating Engine.

**** CONTINUED*****

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0100
DATE: March 18, 1996

2. All required stack testing must be performed and a report submitted to NYSDEC and USEPA within 180 days of initial start-up of the compressor engines, or within 60 days of commercial operation of the facility, whichever comes first. No extensions of this deadline will be granted by NYSDEC.

3. All testing must be done in accordance with protocols approved by NYSDEC in advance of testing. Protocols must be submitted for approval at least 60 days in advance of testing. NYSDEC must be provided with at least 30 days advanced notice of testing. Failure to notify or use approved protocols is grounds for rejection of such tests.

IV. Compliance Certification.

1. Continuous Fuel Monitoring

a. The facility shall maintain a daily log of hours of operation of each Reciprocating Engine. A separate written log for the rolling daily annual total fuel gas limitation shall also be maintained at the facility. Both logs shall be made available to the DEC and EPA inspectors upon request.
b. The total fuel gas consumption shall be limited to the requirements of V.7 This limitation shall be based on a 365 rolling daily annual total (ie., totalizing the total fuel consumption over 365 days, where each day starts the summing period for the new 365 day period).

2. NYSDEC reserves the right to inspect this facility as deemed necessary to determine compliance with this permit. Such inspections may be performed without prior notification by NYSDEC. Routine inspections will be made during reasonable business hours, however, NYSDEC reserves the right to enter the facility at any time if there is cause to believe that the facility is in non-compliance.

3. The following alternate emission limit (5.1 grams NOx per Brakehorse power hour) has been established. The source owner must continue to investigate compliance strategies and submit an annual report documenting the evaluation of abatement technology and/or process modification. The written report must include the results and specific dates of the testing or evaluation. The name(s) of vendors which can independently verify the testing or engineering evaluation must

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0100
DATE: March 18, 1996

4. The Department reserves the right to require the source owner to evaluate and implement innovative technology within a time frame established by the Commissioner's representative as per 621.14(a)(4).

V. Record Keeping and Reporting

1. Algonquin Gas must comply with the notification and record keeping requirements of 40 CFR 60.7 for each gas compressor. The major milestones of 40 CFR 60.7 are to notify USEPA and NYSDEC of construction and facility start-up.

2. Algonquin Gas must monitor the amount of fuel burned in each compressor. Such data must be accurate to $\pm$ 5%.

3. All copies of reports and notification required under this section must be submitted to the NYSDEC Region 3 office, with **one copy** sent to the NYSDEC, attention: Bureau of Enforcement and Regional Support in Albany. Unless stated otherwise, such reports or notification shall be submitted within (30) days after the end of each calendar year quarter. The addresses for the above offices are as follows:

NYSDEC Region 3 office
Attn: Robert Stanton, RAPCE
21 South Putt Corners Road
New Paltz, NY 12561-1696

NYSDEC
Bureau of Enforcement and Regional Support
50 Wolf Road
Albany, NY 12233-3254

4. All records required by this permit must be kept at the facility for the five most recent years, and must be made available upon request of a NYSDEC authorized agent .

5. A summary of the emission limits and operating restrictions of this permit must be posted in the control room of the facility and must be plainly visible (without obstruction) to the operator of the facility. A copy of this summary shall be submitted to NYSDEC prior to facility start-up and is subject to NYSDEC approval.

6. A high energy ignition system with air/fuel ratio controls must be installed

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0100
DATE: March 18, 1996

by May 31, 1995.

7. During the Ozone Season(May 1st through September 15th) the facility shall limit the four reciprocating engines (Clarks) EPs R0100, R0200, R0300, R0400 to a maximum of one hundred and eleven (111 tons NOx).

$T_{ICLARKSI} = T_{R0100} + T_{R0200} + T_{R0300} + T_{R0400} <$ 111 Tons NOx / Ozone Season

$T_{Ozone\ Season} = \Sigma (T_{Ozone\ Days}) <$ 111 Tons NOx / Ozone Season

$T_{Ozone\ Day} = \Sigma (P_{Unit} * F) / (2000\ pounds/Ton) =$ Tons / Day

Where:

T = NOx Tons/time (day,week or year)

P_{Unit} = NOx Pounds/mmBTU for the natural gas used as fuel

Unit = (1) Mars (00GT7) = 0.06 Pounds/mmBTU (maximum)
(2) Centaurs (GT020 & 00006) = 0.12 Pounds/mmBTU (maximum)
(4) Clarks (R0100,R0200,R0300,R0400) = 1.40 Pounds/mmBTU (maximum)

Note: Unit numbers are based on the highest results generated during stack testing and the March 12,1996 letter for the Clark Engines.

F = mmBTU/day

Fuel heat value = 1031 BTU / SCF

8. During the Ozone season the facility must "environmentally dispatch" (use the three turbine engines prior to utilizing the reciprocating engines) whenever possible. If environmental dispatch is not utilized, then Algonquin must demonstrate and document to the satisfaction of the Department the reason(s) why.

VI. Compliance

Any violation of the conditions of this permit is subject to penalty under Article 71 of the New York State Environmental Conservation Law.

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0100
DATE: March 18, 1996

ATTACHMENT 1

Annual NOx Emissions Cap Formula

The following general formula will be used to develop Algonquin's monthly monitoring report to the NYSDEC. NOx emissions for the month preceding the report submittal month will be calculated for each engine. The total of emissions from all engines will be the weekly NOx emissions for the preceding 52 weeks will be shown on the report. Fuel heat value and fuel consumed by each engine will be reported as well.

The formula is as follows:

$T_{station} = T_{clarks} + T_{centaurs} + T_{Mars} <$ **293 Tons NOx / Year**

$T_{year} = \sum (T_{week}$ for the most recent 52 weeks) < 293 Tons NOx/YR

$T_{year} = \sum (P_{unit} * F) / (2000$ pounds/Ton) = Tons / Week

Where:

T = NOx Tons/time (week or year)

P_{unit} = NOx Pounds/mmBTU for the natural gas used as fuel

$_{nit}$ = (1) Mars (00GT7) = 0.06 Pounds/mmBTU (maximum)
(2) Centaurs (GT020 & 00006) = 0.12 Pounds/mmBTU (maximum)
(4) Clarks (R0100,RO200,R0300,R0400) = 1.40 [1] Pounds/mmBTU (maximum)

[1] - 1.40 will be adjusted after the technology has been proven

Note: Unit numbers are based on the highest results generated during stack testing and the March 12,1996 letter for the Clark Engines.

F = mmBTU/week

Fuel heat value = 1031 BTU / SCF

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STATIONARY COMBUSTION INSTALLATION

APPLICATION FOR PERMIT TO CONSTRUCT OR CERTIFICATE TO OPERATE

Location / Facility / Emission Point: 3 9 2 8 0 0 0 7 3 1 / 0 0 2 0 0 0

JAN 25 1991

SECTION A

Name of Owner/Firm	Algonquin Gas Transmission Co.
Number and Street Address	1284 Soldiers Field Road
City / Town / Village	Boston
State	MA
Zip	02135
Owner Classification	Industrial (checked)
Name & Title of Owner's Representative	Timothy C. O'Brien, Manager Environ. Compliance
Telephone	(617) 560-1402
Name of Authorized Agent	ENSR Consulting & Engineering
Telephone	(508) 635-9500
Number and Street Address	35 Nagog Park
City / Town / Village	Acton
State	MA
Zip	01720
Name of P.E. or Architect Preparing Plans	Robert C. McInnes
N.Y.S. P.E. or Architect License No.	064069-1
Telephone	(508) 635-9500
Facility Name	Stony Point Compressor Station
Facility Location (Number and Street Address)	Lindberg Road
City / Town / Village	Stony Point
Zip	10980
Building Name or Number	Compressor Bldg.
Floor Name or Number	1
Start-up Date (Mo/Yr)	7/91
Drawing Numbers of Plans Submitted	SK-1047-005; S-1480-051
Certificate to Operate	Modification (checked)

SECTION B

Emission Point ID	Ground Elevation (FT)	Height Above Structures (FT)	Stack Height (FT)	Inside Dimensions (IN)	Exit Temperature (°F)	Exit Velocity (FT/SEC)	Exit Flow (ACFM)	Heat Input (Million BTU/HR)
0 0 2 0 0	390	18	69	25	845	104	25,800	18.9

SECTION C

Unit Type	Unit Manufacturer's Name and Model Number	Unit Heat Input	No. Units	Source Code
07	Clark TLA-8	18.9	1	7440

Burner Type	No. of Burners	Burner Manufacturer's Name and Model Number	Fuel Type	Avg. Quantity of Fuel/HR	Max. Quantity of Fuel/HR	Quantity of Fuel/YR
NA	NA	NA	52	18,657	18,657	*
NA	NA	NA	NA	NA	NA	NA

Hrs/Day	Days/Year	% Operation by Season: Winter	Spring	Summer	Fall	Name of Supplier
*	*	25	25	25	25	Algonquin Gas Transmission Co.
NA	NA		N/A			NA

SECTION D

Emission Control Equip. No.	Control Type	Manufacturer's Name and Model Number	Disposal Method	Date Installed Mo/Yr	Useful Life
NA	99	NA	NA	NA	NA
NA	99	NA	NA	NA	NA

SECTION E

Calculations

See Attachments A & B

SECTION F

To be completed for all sources using item 37 and other sources as defined in the instruction form 76-1-4

Contaminant Name	CAS Number	Emissions Actual	Unit	Item Det.	Permissible	% Control Efficiency	Hourly Emissions (lbs/hr) Actual	Annual Emissions Actual	HP	Permissible
Total Particulates	[illegible]	Negligible				0	Negligible			
Sulfur Dioxide	7446-09-5	5.3x10	11	9		0	0.001	*		
Nitrogen Oxides	[illegible]	5.26	11	9	**	0	99.4	*		
Carbon Monoxide	630-08-0	1.43	11	9	***	0	27.1	*		
Hydrocarbons	72-82-8	0.68	11	9	***	0	12.9	*		

Upon completion of construction, sign the statement listed below and forward to the appropriate field representative.

The stationary combustion installation has been constructed and will be operated in accordance with stated specifications and in conformance with all provisions of existing regulations.

Signature of Authorized Representative or Agent: [signature]

Date: 1/23/91

AGENCY USE ONLY

Location Code	Facility ID No.	U.T.M. (E)	U.T.M. (N)	SIC Number	Date Appl. Received	Date Appl. Reviewed	Reviewed By
392800	0731	582	0565	4922	/ /	02/28/91	JH

PERMIT TO CONSTRUCT

Date Issued	Expiration Date	Signature of Approval	Fee
/ /	/ /		

1. Deviation from approved application shall void this permit
2. This is not a certificate to operate
3. Tests and/or additional emission control equipment may be required prior to the issuance of a certificate to operate

RECOMMENDED ACTION RE: C.O.

Date Issued	Expiration Date	Signature of Approval	Fee
9/23/91	9/23/96	Q. F. Cialek, J.	50.

1. ☐ Inspected by ________ Date ________
2. ☐ Inspection disclosed differences as built vs. permit. Changes indicated on form
3. ☐ Issue certificate to operate for source
4. ☐ Application for C.O. denied ________ Date ________ Initialed

Special Conditions:

See attached regarding PSD Conditions. Stack test required. Facility wide NOx emission not to exceed 420 TPY

* See "Emissions Cap Formula, Stony Point Compressor Station" (1/91/ACT)

** Previously permitted value   *** Manufacturer's expected emissions

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0200
DATE: March 18, 1996

I. Emission Limits.

1. Emission Point **R0200**
Clark TLA-8 Reciprocating Engine

Emission Limits during Gas Firing:

NOx: 5.1 grams NOx per Brake horsepower hour

CO: 27.1 pounds per hour - [note: based on old PSD limits]

VOC: 12.9 pounds per hour - [note: based on old PSD limits]

2. These limits apply at all loads of operation, except during periods of start-up, malfunctions (as stated in the paragraphs of subdivision 6NYCRR Part 201.5 (d)) and shutdown (not to exceed three hours per occurrence).

3. All emission limits are based on the higher heating value (HHV) of the fuel being burned.

II. Operating Limits

1. The Reciprocating Engine shall fire only natural gas.

2. This emission point **R0200** shall continue to be subject to the facility wide NOx cap of **293** tpy as calculated in ATTACHMENT I.

III Testing Requirements

1. Stack testing for emissions of NOx, CO, and VOC's is required from the Reciprocating Engine.

**** CONTINUED*****

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0200
DATE: March 18, 1996

2. All required stack testing must be performed and a report submitted to NYSDEC and USEPA within 180 days of initial start-up of the compressor engines, or within 60 days of commercial operation of the facility, whichever comes first. No extensions of this deadline will be granted by NYSDEC.

3. All testing must be done in accordance with protocols approved by NYSDEC in advance of testing. Protocols must be submitted for approval at least 60 days in advance of testing. NYSDEC must be provided with at least 30 days advanced notice of testing. Failure to notify or use approved protocols is grounds for rejection of such tests.

IV. Compliance Certification.

1. Continuous Fuel Monitoring

a. The facility shall maintain a daily log of hours of operation of each Reciprocating Engine. A separate written log for the rolling daily annual total fuel gas limitation shall also be maintained at the facility. Both logs shall be made available to the DEC and EPA inspectors upon request.
b. The total fuel gas consumption shall be limited to the requirements of V.7 This limitation shall be based on a 365 rolling daily annual total (ie., totalizing the total fuel consumption over 365 days, where each day starts the summing period for the new 365 day period).

2. NYSDEC reserves the right to inspect this facility as deemed necessary to determine compliance with this permit. Such inspections may be performed without prior notification by NYSDEC. Routine inspections will be made during reasonable business hours, however, NYSDEC reserves the right to enter the facility at any time if there is cause to believe that the facility is in non-compliance.

3. The following alternate emission limit (5.1 grams NOx per Brakehorse power hour) has been established. The source owner must continue to investigate compliance strategies and submit an annual report documenting the evaluation of abatement technology and/or process modification. The written report must include the results and specific dates of the testing or evaluation. The name(s) of vendors which can independently verify the testing or engineering evaluation must

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0200
DATE: March 18, 1996

4. The Department reserves the right to require the source owner to evaluate and implement innovative technology within a time frame established by the Commissioner's representative as per 621.14(a)(4).

V. Record Keeping and Reporting

1. Algonquin Gas must comply with the notification and record keeping requirements of 40 CFR 60.7 for each gas compressor. The major milestones of 40 CFR 60.7 are to notify USEPA and NYSDEC of construction and facility start-up.

2. Algonquin Gas must monitor the amount of fuel burned in each compressor. Such data must be accurate to $\pm$ 5%.

3. All copies of reports and notification required under this section must be submitted to the NYSDEC Region 3 office, with **one copy** sent to the NYSDEC, attention: Bureau of Enforcement and Regional Support in Albany. Unless stated otherwise, such reports or notification shall be submitted within (30) days after the end of each calendar year quarter. The addresses for the above offices are as follows:

NYSDEC Region 3 office
Attn: Robert Stanton, RAPCE
21 South Putt Corners Road
New Paltz, NY 12561-1696

NYSDEC
Bureau of Enforcement and Regional Support
50 Wolf Road
Albany, NY 12233-3254

4. All records required by this permit must be kept at the facility for the five most recent years, and must be made available upon request of a NYSDEC authorized agent .

5. A summary of the emission limits and operating restrictions of this permit must be posted in the control room of the facility and must be plainly visible (without obstruction) to the operator of the facility. A copy of this summary shall be submitted to NYSDEC prior to facility start-up and is subject to NYSDEC approval.

6. A high energy ignition system with air/fuel ratio controls must be installed

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0200
DATE: March 18, 1996

by May 31, 1995.

7. During the Ozone Season(May 1st through September 15th) the facility shall limit the four reciprocating engines (Clarks) EPs R0100, R0200, R0300, R0400 to a maximum of one hundred and eleven (111 tons NOx).

$T_{(CLARKS)} = T_{R0100} + T_{R0200} + T_{R0300} + T_{R0400} <$ 111 Tons NOx / Ozone Season

$T_{Ozone\ Season} = \sum (T_{Ozone\ Days}) <$ 111 Tons NOx / Ozone Season

$T_{Ozone\ Day} = \sum (P_{Unit} * F) / (2000\ pounds/Ton) =$ Tons / Day

Where:

T = NOx Tons/time (day,week or year)

P_{Unit} = NOx Pounds/mmBTU for the natural gas used as fuel

Unit = (1) Mars (00GT7) = 0.06 Pounds/mmBTU (maximum)
(2) Centaurs (GT020 & 00006) = 0.12 Pounds/mmBTU (maximum)
(4) Clarks (R0100,R0200,R0300,R0400) = 1.40 Pounds/mmBTU (maximum)

Note: Unit numbers are based on the highest results generated during stack testing and the March 12,1996 letter for the Clark Engines.

F = mmBTU/day

Fuel heat value = 1031 BTU / SCF

8. During the Ozone season the facility must "environmentally dispatch" (use the three turbine engines prior to utilizing the reciprocating engines) whenever possible. If environmental dispatch is not utilized, then Algonquin must demonstrate and document to the satisfaction of the Department the reason(s) why.

VI. Compliance

Any violation of the conditions of this permit is subject to penalty under Article 71 of the New York State Environmental Conservation Law.

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0200
DATE: March 18, 1996

ATTACHMENT 1

Annual NOx Emissions Cap Formula

The following general formula will be used to develop Algonquin's monthly monitoring report to the NYSDEC. NOx emissions for the month preceding the report submittal month will be calculated for each engine. The total of emissions from all engines will be the weekly NOx emissions for the preceding 52 weeks will be shown on the report. Fuel heat value and fuel consumed by each engine will be reported as well.

The formula is as follows:

$T_{station} = T_{clarks} + T_{centaurs} + T_{Mars} < 293$ **Tons NOx / Year**

$T_{year} = \sum (T_{week}$ for the most recent 52 weeks) < 293 Tons NOx/YR

$T_{year} = \sum (P_{unit} * F) / (2000$ pounds/Ton) = Tons / Week

Where:

T = NOx Tons/time (week or year)

P_{unit} = NOx Pounds/mmBTU for the natural gas used as fuel

nit = (1) Mars (00GT7) = 0.06 Pounds/mmBTU (maximum)
(2) Centaurs (GT020 & 00006) = 0.12 Pounds/mmBTU (maximum)
(4) Clarks (R0100,R0200,R0300,R0400) = 1.40 [1] Pounds/mmBTU (maximum)

[1] - 1.40 will be adjusted after the technology has been proven

Note: Unit numbers are based on the highest results generated during stack testing and the March 12,1996 letter for the Clark Engines.

F = mmBTU/week

Fuel heat value = 1031 BTU / SCF

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STATIONARY COMBUSTION INSTALLATION

APPLICATION FOR PERMIT TO CONSTRUCT OR CERTIFICATE TO OPERATE

JAN 25 1991

NYS DEC

Section A

Name of Owner/Firm: Algonquin Gas Transmission Co.	Name of Authorized Agent: EBSE Consulting & Engineering	Telephone: (508) 635-9500
Number and Street Address: 1284 Soldiers Field Road	Number and Street Address: 35 Nagog Park	Facility Name: Stony Point Compressor Station
City: Boston / State: MA / Zip: 02135	City: Acton / State: MA / Zip: 01720	Facility Location: Lindberg Road
Owner Classification: Industrial	Name of P.E. or Architect Preparing Plans: Robert G. McInnes / License No.: 064069-1 / Telephone: (508) 635-9500	City: Stony Point / Zip: 10980
Owner's Representative: Timothy C. O'Brien, Manager Environ. Compliance / Telephone: (617) 560-1402		Building: Compressor Bldg. / Floor: 1
		Start-up Date: 1/91 / Drawing Numbers: SK-1047-005; S-1480-051

Section B

Emission Point ID	Ground Elevation (ft)	Height Above Structures (ft)	Stack Height (ft)	Inside Dimensions (in)	Exit Temperature (°F)	Exit Velocity (ft/sec)	Exit Flow (ACFM)	Heat Input (Million BTU/HR)
8 C 3 0 0	290	18	69	29	845	104	28,800	15.5

Section C

Unit Type	Unit Manufacturer's Name and Model Number	Unit Heat Input	No. in Place	Source Code
07	Clark TLA-6	15.9	1	A7410

Burner Type	No. of Burners	Burner Manufacturer's Name and Model Number	Fuel Type	Avg. Quantity of Fuel/HR	Max. Quantity of Fuel/HR	Quantity of Fuel/YR
NA	NA	NA	52	16,657	16,657	*

Hrs/Day	Days/Year	% Operation by Season (Winter / Spring / Summer / Fall)	Name of Supplier
*	*	25 / 25 / 25 / 25	Algonquin Gas Transmission Co.

Burner Type	No. of Burners	Burner Manufacturer's Name and Model Number	Fuel Type	Avg. Quantity of Fuel/HR	Max. Quantity of Fuel/HR	Quantity of Fuel/YR
NA	NA	NA	NA	NA	NA	NA

Hrs/Day	Days/Year	% Operation by Season	Name of Supplier
NA	NA	N A	NA

Section D

Emission Control Group ID	Control Type	Manufacturer's Name and Model Number	Disposal Method	Date Installed	Useful Life
NA	99	NA	NA	NA	NA
NA	99	NA	NA	NA	NA

Section E

Calculations

See Attachments A & B

Section F

Contaminant Name	CAS Number	Emissions Actual	Unit	Env. Rating	Permissible	% Control Efficiency	Hourly Emissions Actual	Annual Emissions Actual	%	Permissible
Total Particulates	NY075-00-0	Negligible				0	Negligible			
Sulfur Dioxide	7446-09-5	3.3x10	11	9	**	0	0.001	*		
Nitrogen Oxides	NY210-00-0	5.26	11	9	***	0	99.4	*		
Carbon Monoxide	630-08-0	1.42	11	9	***	0	23.1	*		
Hydrocarbons	72-82-8	0.68	11	9	***	0	12.9	*		

THE STATIONARY COMBUSTION INSTALLATION HAS BEEN CONSTRUCTED AND WILL BE OPERATED IN ACCORDANCE WITH STATED SPECIFICATIONS AND IN CONFORMANCE WITH ALL PROVISIONS OF EXISTING REGULATIONS.

Signature of Authorized Representative or Agent: T. C. O'Brien — Date: 1/28/91

Agency Use Only

Location Code	Facility ID No.	UTM (E)	UTM (N)		Date Appl. Received	Date Appl. Reviewed	Reviewed By
3 9 2 8 0 0	0 7 3 1	5 8 2 0	5 6 5 8	4 9 2 2	/ /	4 / 22 / 92	T.M.

PERMIT TO CONSTRUCT

Date Issued	Expiration Date	Signature of Approval	Fee
/ /	/ /		

1. DEVIATION FROM APPROVED APPLICATION SHALL VOID THIS PERMIT
2. THIS IS NOT A CERTIFICATE TO OPERATE
3. TESTS AND/OR ADDITIONAL EMISSION CONTROL EQUIPMENT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE TO OPERATE

RECOMMENDED ACTION RE: C.O.

Date Issued	Expiration Date	Signature of Approval	Fee
9/23/91	9/23/96	G. E. Cumbick, Jr.	50.

1. ☐ INSPECTED BY ______ DATE ______
2. ☐ INSPECTION DISCLOSED DIFFERENCES AS BUILT VS. PERMIT, CHANGES INDICATED ON FORM
3. ☐ ISSUE CERTIFICATE TO OPERATE FOR SOURCE
4. ☐ APPLICATION FOR C.O. DENIED ______ DATE ______ INITIALS

Special Conditions:

1. See attached regarding PSD Conditions and compliance with NSPS - GG
2. stack test required. Facility wide NOx Emission not to exceed 420 TPY

* See Emissions Cap Formula, Stony Point Compressor Station (1/91 ACT)
** Previously permitted value
*** Manufacturer's expected emissions

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0300
DATE: March 18, 1996

I. Emission Limits.

1. Emission Point **R0300**
Clark TLA-8 Reciprocating Engine

Emission Limits during Gas Firing:

NOx: 5.1 grams NOx per Brake horsepower hour

CO: 27.1 pounds per hour - [note: based on old PSD limits]

VOC: 12.9 pounds per hour - [note: based on old PSD limits]

2. These limits apply at all loads of operation, except during periods of start-up, malfunctions (as stated in the paragraphs of subdivision 6NYCRR Part 201.5 (d)) and shutdown (not to exceed three hours per occurrence).

3. All emission limits are based on the higher heating value (HHV) of the fuel being burned.

II. Operating Limits

1. The Reciprocating Engine shall fire only natural gas.

2. This emission point **R0300** shall continue to be subject to the facility wide NOx cap of **293** tpy as calculated in ATTACHMENT I.

III Testing Requirements

1. Stack testing for emissions of NOx, CO, and VOC's is required from the Reciprocating Engine.

**** CONTINUED*****

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0300
DATE: March 18, 1996

2. All required stack testing must be performed and a report submitted to NYSDEC and USEPA within 180 days of initial start-up of the compressor engines, or within 60 days of commercial operation of the facility, whichever comes first. No extensions of this deadline will be granted by NYSDEC.

3. All testing must be done in accordance with protocols approved by NYSDEC in advance of testing. Protocols must be submitted for approval at least 60 days in advance of testing. NYSDEC must be provided with at least 30 days advanced notice of testing. Failure to notify or use approved protocols is grounds for rejection of such tests.

IV. Compliance Certification.

1. Continuous Fuel Monitoring

a. The facility shall maintain a daily log of hours of operation of each Reciprocating Engine. A separate written log for the rolling daily annual total fuel gas limitation shall also be maintained at the facility. Both logs shall be made available to the DEC and EPA inspectors upon request.

b. The total fuel gas consumption shall be limited to the requirements of V.7 This limitation shall be based on a 365 rolling daily annual total (ie., totalizing the total fuel consumption over 365 days, where each day starts the summing period for the new 365 day period).

2. NYSDEC reserves the right to inspect this facility as deemed necessary to determine compliance with this permit. Such inspections may be performed without prior notification by NYSDEC. Routine inspections will be made during reasonable business hours, however, NYSDEC reserves the right to enter the facility at any time if there is cause to believe that the facility is in non-compliance.

3. The following alternate emission limit (5.1 grams NOx per Brakehorse power hour) has been established. The source owner must continue to investigate compliance strategies and submit an annual report documenting the evaluation of abatement technology and/or process modification. The written report must include the results and specific dates of the testing or evaluation. The name(s) of vendors which can independently verify the testing or engineering evaluation must

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0300
DATE: March 18, 1996

4. The Department reserves the right to require the source owner to evaluate and implement innovative technology within a time frame established by the Commissioner's representative as per 621.14(a)(4).

V. Record Keeping and Reporting

1. Algonquin Gas must comply with the notification and record keeping requirements of 40 CFR 60.7 for each gas compressor. The major milestones of 40 CFR 60.7 are to notify USEPA and NYSDEC of construction and facility start-up.

2. Algonquin Gas must monitor the amount of fuel burned in each compressor. Such data must be accurate to $\pm$ 5%.

3. All copies of reports and notification required under this section must be submitted to the NYSDEC Region 3 office, with **one copy** sent to the NYSDEC, attention: Bureau of Enforcement and Regional Support in Albany. Unless stated otherwise, such reports or notification shall be submitted within (30) days after the end of each calendar year quarter. The addresses for the above offices are as follows:

NYSDEC Region 3 office
Attn: Robert Stanton, RAPCE
21 South Putt Corners Road
New Paltz, NY 12561-1696

NYSDEC
Bureau of Enforcement and Regional Support
50 Wolf Road
Albany, NY 12233-3254

4. All records required by this permit must be kept at the facility for the five most recent years, and must be made available upon request of a NYSDEC authorized agent .

5. A summary of the emission limits and operating restrictions of this permit must be posted in the control room of the facility and must be plainly visible (without obstruction) to the operator of the facility. A copy of this summary shall be submitted to NYSDEC prior to facility start-up and is subject to NYSDEC approval.

6. A high energy ignition system with air/fuel ratio controls must be installed

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0300
DATE: March 18, 1996

by May 31, 1995.

7. During the Ozone Season(May 1st through September 15th) the facility shall limit the four reciprocating engines (Clarks) EPs R0100, R0200, R0300, R0400 to a maximum of one hundred and eleven (111 tons NOx).

$T_{(CLARKS)} = T_{R0100} + T_{R0200} + T_{R0300} + T_{R0400} <$ 111 Tons NOx / Ozone Season

$T_{Ozone\ season} = \sum (T_{ozone\ days}) <$ 111 Tons NOx / Ozone Season

$T_{Ozone\ Day} = \sum (P_{Unit} * F) / (2000\ pounds/Ton) =$ Tons / Day

Where:

T = NOx Tons/time (day,week or year)

P_{unit} = NOx Pounds/mmBTU for the natural gas used as fuel

unit = (1) Mars (00GT7) = 0.06 Pounds/mmBTU (maximum)
(2) Centaurs (GT020 & 00006) = 0.12 Pounds/mmBTU (maximum)
(4) Clarks (R0100,R0200,R0300,R0400) = 1.40 Pounds/mmBTU (maximum)

Note: Unit numbers are based on the highest results generated during stack testing and the March 12,1996 letter for the Clark Engines.

F = mmBTU/day

Fuel heat value = 1031 BTU / SCF

8. During the Ozone season the facility must "environmentally dispatch" (use the three turbine engines prior to utilizing the reciprocating engines) whenever possible. If environmental dispatch is not utilized, then Algonquin must demonstrate and document to the satisfaction of the Department the reason(s) why.

VI. Compliance
Any violation of the conditions of this permit is subject to penalty under Article 71 of the New York State Environmental Conservation Law.

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0300
DATE: March 18, 1996

ATTACHMENT 1

Annual NOx Emissions Cap Formula

The following general formula will be used to develop Algonquin's monthly monitoring report to the NYSDEC. NOx emissions for the month preceding the report submittal month will be calculated for each engine. The total of emissions from all engines will be the weekly NOx emissions for the preceding 52 weeks will be shown on the report. Fuel heat value and fuel consumed by each engine will be reported as well.

The formula is as follows:

$T_{station} = T_{clarks} + T_{centaurs} + T_{Mars} < 293$ **Tons NOx / Year**

$T_{year} = \sum (T_{Week}$ for the most recent 52 weeks) < 293 Tons NOx/YR

$T_{year} = \sum (P_{Unit} * F) / (2000$ pounds/Ton) = Tons / Week

Where:

T = NOx Tons/time (week or year)

P_{Unit} = NOx Pounds/mmBTU for the natural gas used as fuel

nit = (1) Mars (00GT7) = 0.06 Pounds/mmBTU (maximum)
(2) Centaurs (GT020 & 00006) = 0.12 Pounds/mmBTU (maximum)
(4) Clarks (R0100,R0200,R0300,R0400) = 1.40 [1] Pounds/mmBTU (maximum)

[1] - 1.40 will be adjusted after the technology has been proven

Note: Unit numbers are based on the highest results generated during stack testing and the March 12,1996 letter for the Clark Engines.

F = mmBTU/week

Fuel heat value = 1031 BTU / SCF

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STATIONARY COMBUSTION INSTALLATION

APPLICATION FOR PERMIT TO CONSTRUCT OR CERTIFICATE TO OPERATE

Location / Facility / Emission Point: 3 9 2 8 0 0 0 7 3 / 1 P 0 4 0 0 C

JAN 2 __ 1991 — NYS-DEC REGION 3 NEW PALTZ

SECTION A

1. Name of Owner/Firm: Algonquin Gas Transmission Co.	8. Name of Authorized Agent: ENSR Consulting & Engineering	10. Telephone: (508) 635-9500	13. Facility Name: Stony Point Compressor Station
2. Number and Street Address: 1284 Soldiers Field Road	11. Number and Street Address: 35 Nagog Park		14. Facility Location: Lindberg Road
3. City/Town/Village: Boston; State: MA; Zip: 02135	12. City/Town/Village: Acton; State: MA; Zip: 01720		15. City/Town/Village: Stony Point; Zip: 10980
4. Owner Classification: B. [X] Industrial	9. Name of P.E. or Architect Preparing Plans: Robert G. McInnes	N.Y.S. P.E. License No.: 064069-1; Telephone: (508) 635-9500	16. Building Name or Number: Compressor Building; Floor: 1
			17. Start of Date: 7/91; 18. Drawing Numbers of Plans Submitted: SK-1047-005; S-1480-051
7. Name & Title of Owner's Representative: Timothy C. O'Brien, Manager Environmental Compliance; Telephone: (617) 560-1402			20. Certificate to Operate: B. [X] Modification

SECTION B

Emission Point ID	Ground Elevation (ft)	Height Above Structure (ft)	Stack Height (ft)	Inside Dimensions (in)	Exit Temperature (°F)	Exit Velocity (ft/sec)	Exit Flow (ACFM)	Heat Input Million BTU/HR
R 0 4 0 0	290	18	63	29	843	104	28,809	16.9

SECTION C

Unit Type	Unit Manufacturer's Name and Model Number	Unit Heat Input	Air Intake	Source Code
07	Clark TLA-6	16.9	1	A7410

Burner Type	No. of Burners	Burner Manufacturer's Name and Model Number	Fuel Type	Avg. Quantity of Fuel/HR	Max. Quantity of Fuel/HR	Quantity of Fuel/YR
NA	N/A	NA	52	16,657	16,657	*
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Hrs/Day	Days/Year	% Operation by Season (Winter, Spring, Summer, Fall)	Name of Supplier
*	*	25, 25, 25, 25	Algonquin Gas Transmission Co.
N/A	N/A	N/A	N/A

SECTION D

Emission Source Group ID	Control Type	Manufacturer's Name and Model Number	Disposal Method	Date Installed	Useful Life
N/A	99	N/A	N/A	N/A	N/A
N/A	99	N/A	N/A	N/A	N/A

SECTION E

Calculations: See Attachments A & B

SECTION F

To be completed for all sources using item 37 and other sources as defined in the instruction form 76-19-4

Contaminant Name	CAS Number	Emissions Actual	Units	Rate Cat.	Permissible	% Control Efficiency	Hourly Emissions Actual	Annual Emissions Actual	Units	Permissible
Total Particulates	NY075-00-0	Negligible				0	Negligible			
Sulfur Dioxide	7446-09-5	3.1x10	11	9	**	0	0.001	*		
Nitrogen Oxides	NY210-00-0	5.26	11	9	***	0	99.4	*		
Carbon Monoxide	630-08-0	1.43	11	9	***	0	27.1	*		
Hydrocarbons	72-62-8	0.68	11	9	***	0	12.9	*		

Upon completion of construction sign the statement listed below and forward to the appropriate DEC representative.
THE STATIONARY COMBUSTION INSTALLATION HAS BEEN CONSTRUCTED AND WILL BE OPERATED IN ACCORDANCE WITH STATED SPECIFICATIONS AND IN CONFORMANCE WITH ALL PROVISIONS OF EXISTING REGULATIONS.

Signature of Owner, Representative or Agent: [signature] Date: 1/23/91

Location Code	Facility ID No.	U.T.M. (E)	U.T.M. (N)	AC Number	Date Appl. Received	Date Appl. Reviewed	Reviewed By
3 9 2 8 0 0	0 7 3 /	5 8 2 0	5 6 5 8	4 P Z 7	/ /	02/28/91	J. M.

PERMIT TO CONSTRUCT

Date Issued	Expiration Date	Signature of Approval	Fee
/ /	/ /		

1. Deviation from approved application shall void this permit
2. This is not a certificate to operate
3. Tests and/or additional emission control equipment may be required prior to the issuance of a certificate to operate

RECOMMENDED ACTION RE: C.O.

Date Issued	Expiration Date	Signature of Approval	Fee
9/23/91	9/23/96	A. J. Coluk, Jr.	50.

1. [ ] Inspected by ______ Date ______
2. [ ] Inspector discloses differences as built vs. permit, changes indicated on form
3. [ ] Issue certificate to operate for source
4. [ ] Application for C.O. denied ______ Date ______ Initialed

AGENCY USE ONLY

Special Conditions:
1. See attached regarding PSD Conditions. Stack test required. Facility wide NOx emissions not to exceed 424 TPY.

* See Emissions Cap Formula, Stony Point Compressor Station (1/91 ACT)
** Previously Permitted Value; *** Manufacturer's Expected Emissions

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0400
DATE: March 16, 1996
29

I. Emission Limits.

1. Emission Point **R0400**
Clark TLA-8 Reciprocating Engine

Emission Limits during Gas Firing:

NOx: 5.1 grams NOx per Brake horsepower hour

CO: 27.1 pounds per hour - (note: based on old PSD limits)

VOC: 12.9 pounds per hour - (note: based on old PSD limits)

2. These limits apply at all loads of operation, except during periods of start-up, malfunctions (as stated in the paragraphs of subdivision 6NYCRR Part 201.5 (d)) and shutdown (not to exceed three hours per occurrence).

3. All emission limits are based on the higher heating value (HHV) of the fuel being burned.

II. Operating Limits

1. The Reciprocating Engine shall fire only natural gas.

2. This emission point **R0400** shall continue to be subject to the facility wide NOx cap of **293** tpy as calculated in ATTACHMENT I.

III Testing Requirements

1. Stack testing for emissions of NOx, CO, and VOC's is required from the Reciprocating Engine.

**** CONTINUED*****

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0400
DATE: March ~~16~~ 29, 1996

2. All required stack testing must be performed and a report submitted to NYSDEC and USEPA within 180 days of initial start-up of the compressor engines, or within 60 days of commercial operation of the facility, whichever comes first. No extensions of this deadline will be granted by NYSDEC.

3. All testing must be done in accordance with protocols approved by NYSDEC in advance of testing. Protocols must be submitted for approval at least 60 days in advance of testing. NYSDEC must be provided with at least 30 days advanced notice of testing. Failure to notify or use approved protocols is grounds for rejection of such tests.

IV. Compliance Certification.

1. Continuous Fuel Monitoring

a. The facility shall maintain a daily log of hours of operation of each Reciprocating Engine. A separate written log for the rolling daily annual total fuel gas limitation shall also be maintained at the facility. Both logs shall be made available to the DEC and EPA inspectors upon request.

b. The total fuel gas consumption shall be limited to the requirements of V.7 This limitation shall be based on a 365 rolling daily annual total (ie., totalizing the total fuel consumption over 365 days, where each day starts the summing period for the new 365 day period).

2. NYSDEC reserves the right to inspect this facility as deemed necessary to determine compliance with this permit. Such inspections may be performed without prior notification by NYSDEC. Routine inspections will be made during reasonable business hours, however, NYSDEC reserves the right to enter the facility at any time if there is cause to believe that the facility is in non-compliance.

3. The following alternate emission limit (5.1 grams NOx per Brakehorse power hour) has been established. The source owner must continue to investigate compliance strategies and submit an annual report documenting the evaluation of abatement technology and/or process modification. The written report must include the results and specific dates of the testing or evaluation. The name(s) of vendors which can independently verify the testing or engineering evaluation must

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0400
DATE: March ~~18~~ 29, 1996

4. The Department reserves the right to require the source owner to evaluate and implement innovative technology within a time frame established by the Commissioner's representative as per 621.14(a)(4).

V. Record Keeping and Reporting

1. Algonquin Gas must comply with the notification and record keeping requirements of 40 CFR 60.7 for each gas compressor. The major milestones of 40 CFR 60.7 are to notify USEPA and NYSDEC of construction and facility start-up.

2. Algonquin Gas must monitor the amount of fuel burned in each compressor. Such data must be accurate to ± 5%.

3. All copies of reports and notification required under this section must be submitted to the NYSDEC Region 3 office, with **one copy** sent to the NYSDEC, attention: Bureau of Enforcement and Regional Support in Albany. Unless stated otherwise, such reports or notification shall be submitted within (30) days after the end of each calendar year quarter. The addresses for the above offices are as follows:

NYSDEC Region 3 office
Attn: Robert Stanton, RAPCE
21 South Putt Corners Road
New Paltz, NY 12561-1696

NYSDEC
Bureau of Enforcement and Regional Support
50 Wolf Road
Albany, NY 12233-3254

4. All records required by this permit must be kept at the facility for the five most recent years, and must be made available upon request of a NYSDEC authorized agent .

5. A summary of the emission limits and operating restrictions of this permit must be posted in the control room of the facility and must be plainly visible (without obstruction) to the operator of the facility. A copy of this summary shall be submitted to NYSDEC prior to facility start-up and is subject to NYSDEC approval.

6. A high energy ignition system with air/fuel ratio controls must be installed

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0400
DATE: March 15, 1996
22

by May 31, 1995.

7. During the Ozone Season(May 1st through September 15th) the facility shall limit the four reciprocating engines (Clarks) EPs R0100, R0200, R0300, R0400 to a maximum of one hundred and eleven (111 tons NOx).

$T_{(CLARKS)} = T_{R0100} + T_{R0200} + T_{R0300} + T_{R0400} <$ 111 Tons NOx / Ozone Season

$T_{ozone\ season} = \sum (T_{ozone\ days}) <$ 111 Tons NOx / Ozone Season

$T_{Ozone\ Day} = \sum (P_{unit} * F) / (2000\ pounds/Ton) =$ Tons / Day

Where:

T = NOx Tons/time (day,week or year)

P_{unit} = NOx Pounds/mmBTU for the natural gas used as fuel

Unit = (1) Mars (00GT7) = 0.06 Pounds/mmBTU (maximum)
(2) Centaurs (GT020 & 00006) = 0.12 Pounds/mmBTU (maximum)
(4) Clarks (R0100,R0200,R0300,R0400) = 1.40 Pounds/mmBTU (maximum)

Note: Unit numbers are based on the highest results generated during stack testing and the March 12,1996 letter for the Clark Engines.

F = mmBTU/day

Fuel heat value = 1031 BTU / SCF

8. During the Ozone season the facility must "environmentally dispatch" (use the three turbine engines prior to utilizing the reciprocating engines) whenever possible. If environmental dispatch is not utilized, then Algonquin must demonstrate and document to the satisfaction of the Department the reason(s) why.

VI. Compliance

Any violation of the conditions of this permit is subject to penalty under Article 71 of the New York State Environmental Conservation Law.

SPECIAL CONDITIONS

For Article (19)
DIVISION OF AIR

FACILITY: ALGONQUIN GAS TRANSMISSION CORPORATION
EMISSION POINT: R0400
DATE: March 18, 1996
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ATTACHMENT 1

Annual NOx Emissions Cap Formula

The following general formula will be used to develop Algonquin's monthly monitoring report to the NYSDEC. NOx emissions for the month preceding the report submittal month will be calculated for each engine. The total of emissions from all engines will be the weekly NOx emissions for the preceding 52 weeks will be shown on the report. Fuel heat value and fuel consumed by each engine will be reported as well.

The formula is as follows:

$T_{station} = T_{Clarks} + T_{Centaurs} + T_{Mars} < 293$ **Tons NOx / Year**

$T_{year} = \sum (T_{week}$ for the most recent 52 weeks) < 293 Tons NOx/YR

$T_{year} = \sum (P_{unit} * F) / (2000$ pounds/Ton) = Tons / Week

Where:

T = NOx Tons/time (week or year)

P_{unit} = NOx Pounds/mmBTU for the natural gas used as fuel

nic = (1) Mars (00GT7) = 0.06 Pounds/mmBTU (maximum)
(2) Centaurs (GT020 & 00006) = 0.12 Pounds/mmBTU (maximum)
(4) Clarks (R0100,R0200,R0300,R0400) = 1.40 [1] Pounds/mmBTU (maximum)

[1] - 1.40 will be adjusted after the technology has been proven
Note: Unit numbers are based on the highest results generated during stack testing and the March 12,1996 letter for the Clark Engines.
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F = mmBTU/week

Fuel heat value = 1031 BTU / SCF