



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
HURON COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 03-13913

DATE: 11/26/2002

KNG ENERGY - Norwalk Compressor Station
Pat McGonagle
1700 Westfield Drive
Findlay, OH 45840

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

NWDO



**Permit To Install
Terms and Conditions**

**Issue Date: 11/26/2002
Effective Date: 11/26/2002**

FINAL PERMIT TO INSTALL 03-13913

Application Number: 03-13913
APS Premise Number: 0339020174
Permit Fee: **\$400**
Name of Facility: KNG ENERGY - Norwalk Compressor Station
Person to Contact: Pat McGonagle
Address: 1700 Westfield Drive
Findlay, OH 45840

Location of proposed air contaminant source(s) [emissions unit(s)]:

**4481 SR 601
Norwalk, Ohio**

Description of proposed emissions unit(s):

2 - 1680 hp. natural gas fired engines for natural gas transmission lines.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Record keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

KNG ENERGY - Norwalk Compressor Station
PTI Application: 03-13913
Issued: 11/26/2002

Facility ID: 0339020174

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
NO _x	64.92
SO ₂	0.08
CO	64.92
OC	32.42
PE	1.66

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
	OAC rule 3745-21-08(B)
	OAC rule 3745-23-06(B)
P001 - 1680 hp. natural gas fired engines with catalytic reduction	OAC rule 3745-31-05(A)(3)

OAC rule 3745-17-07(A)

OAC rule 3745-17-11(B)(5)(b)

OAC rule 3745-18-06(D)

OAC rule 3745-21-07(B)

Applicable Emissions
Limitations/Control Measures

7.41 lbs nitrogen oxides (NO_x)/hr
& 32.46 tons NO_x/yr

0.01 lb sulfur dioxide (SO₂)/hr &
0.04 ton SO₂/yr

7.41 lbs carbon monoxide (CO)/hr
&
32.46 tons CO/yr

3.70 lbs/hr organic compounds
(OC), 16.21 tons OC/yr

0.19 lb particulate emissions
(PE)/hr
& 0.83 ton PE/yr

Visible PE shall not exceed 10%
opacity as a 6-minute average

See A.2.a. and A.2.d.

See A.2.b.

See A.2.b.

See A.2.b.

See A.2.c.

See A.2.c.

See A.2.c.

2. Additional Terms and Conditions

- 2.a.** The "Best Available Technology" (BAT) control requirement for this emissions unit has been determined to be the use of a catalytic converter with an automatic controller for the engine speed and fuel-to-air ratio. BAT requirements also include compliance with the terms and conditions of this permit.
- 2.b.** The emissions limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
- 2.c.** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) and the "latest available control techniques and operating practices required pursuant to OAC rule 3745-21-07(B) and OAC rule 3745-23-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.
- 2.d.** The hourly emissions limitations outlined are based upon the emissions unit's potential to emit (PTE). Therefore, no monitoring, record keeping, or reporting is required to demonstrate compliance with these limitations.

B. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.
- 2.** The permittee shall properly install, operate and maintain an automatic controller for the engine speed and fuel-to-air ratio on this emissions unit. The permittee shall also establish set points for the automatic fuel- to- air ratio controller during the performance test required by condition E.1.

C. Monitoring and/or Record keeping Requirements

- 1.** The permittee shall maintain a record of any periods of time the emissions unit was operated at set points other than those established in condition B.2.
- 2.** For each day during which the permittee burns a fuel other than natural gas the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- 3.** The permit to install for this emissions unit was evaluated based on the actual materials used and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was

compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: formaldehyde

TLV (mg/m³): 273 (converted from STEL)

Maximum Hourly Emission Rate (lbs/hr): 1.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1.70

MAGLC (ug/m³): 6.49

* For emissions units P001 and P002 combined.

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,
- c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify any periods of time the emissions unit was operated at set points other than those established in condition B.2. Each report shall be submitted within 30 days after the deviation occurs.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 180 days following start-up of this emissions unit.
 - b. Emission testing shall be conducted to demonstrate compliance with the mass emission limitations for CO and NO_x.
 - c. The following test methods shall be employed to demonstrate compliance with the above emission limitations: for NO_x, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A; and for CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing

procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. Compliance with the emission limitations in the terms and conditions of this permit shall be determined in accordance with the following methods:

a. **Emission Limitation:**

7.41 lbs NO_x/hr & 32.46 tons NO_x/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by the emissions testing as described in condition E.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours and dividing by 2000 lbs/ton.

b. **Emission Limitation:**

0.01 lb SO₂/hr & 0.04 ton SO₂/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the emission factor of 0.000588 lb SO₂/mmBtu (AP-42 Section 3.2-3, dated 7/00) by the units maximum capacity of 13.07 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4 and 6 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours and dividing by 2000 lbs/ton.

c. **Emission Limitation:**

7.41 lbs CO/hr & 32.46 tons CO/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by the emissions testing as described in condition E.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours and dividing by 2000 lbs/ton.

- d. **Emission Limitation:**
3.70 lbs OC/hr & 16.21 tons OC/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 1.0 grams OC/hp-hr by the maximum capacity of 1680 hp and multiplying by 1.0 lb/453.6 grams. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4 and 18, 25 or 25a of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours and dividing by 2000 lbs/ton.

- e. **Emission Limitation:**
0.18 lb PE/hr & 0.83 ton PE/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.05 gram PE/hp-hr by the maximum capacity of 1680 hp and multiplying by 1.0 lb/453.6 grams. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours and dividing by 2000 lbs/ton.

- f. **Emission Limitation:**
Visible PE shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 9 of 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-21-07(B)
P002 - 1680 hp. natural gas fired engines	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-08(B)
		OAC rule 3745-23-06(B)
	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-11(B)(5)(b)	
	OAC rule 3745-18-06(D)	

Applicable Emissions
Limitations/Control Measures

7.41 lbs nitrogen oxides (NO_x)/hr
& 32.46 tons NO_x/yr

0.01 lb sulfur dioxide (SO₂)/hr &
0.04 ton SO₂/yr

7.41 lbs carbon monoxide (CO)/hr
&
32.46 tons CO/yr

3.70 lbs/hr organic compounds
(OC), 16.21 tons OC/yr

0.19 lb particulate emissions
(PE)/hr
& 0.83 ton PE/yr

Visible PE shall not exceed 10%
opacity as a 6-minute average

See A.2.a. and A.2.d.

See A.2.b.

See A.2.b.

See A.2.b.

See A.2.c.

See A.2.c.

See A.2.c.

2. Additional Terms and Conditions

2.a. The "Best Available Technology" (BAT) control requirement for this emissions unit has

been determined to be the use of a catalytic converter with an automatic controller for the engine speed and fuel-to-air ratio. BAT requirements also include compliance with the terms and conditions of this permit.

- 2.b.** The emissions limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
- 2.c.** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) and the "latest available control techniques and operating practices required pursuant to OAC rule 3745-21-07(B) and OAC rule 3745-23-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.
- 2.d.** The hourly emissions limitations outlined are based upon the emissions unit's potential to emit (PTE). Therefore, no monitoring, record keeping, or reporting is required to demonstrate compliance with these limitations.

B. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit.
- 2.** The permittee shall properly install, operate and maintain an automatic controller for the engine speed and fuel-to-air ratio on this emissions unit. The permittee shall also establish set points for the automatic fuel- to- air ratio controller during the performance test required by condition E.1.

C. Monitoring and/or Record keeping Requirements

- 1.** The permittee shall maintain a record of any periods of time the emissions unit was operated at set points other than those established in condition B.2.
- 2.** For each day during which the permittee burns a fuel other than natural gas the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- 3.** The permit to install for this emissions unit was evaluated based on the actual materials used and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was

compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: formaldehyde

TLV (mg/m³): 273 (converted from STEL)

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MAGLC (ug/m³): 6.49

* For emissions units P001 and P002 combined.

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,
- c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify any periods of time the emissions unit was operated at set points other than those established in condition B.2. Each report shall be submitted within 30 days after the deviation occurs.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 180 days following start-up of this emissions unit.
 - b. Emission testing shall be conducted to demonstrate compliance with the mass emission limitations for CO and NO_x.
 - c. The following test methods shall be employed to demonstrate compliance with the above emission limitations: for NO_x, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A; and for CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing

procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. Compliance with the emission limitations in the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. **Emission Limitation:**
7.41 lbs NO_x/hr & 32.46 tons NO_x/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by the emissions testing as described in condition E.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours and dividing by 2000 lbs/ton.

- b. **Emission Limitation:**
0.01 lb SO₂/hr & 0.04 ton SO₂/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the emission factor of 0.000588 lb SO₂/mmBtu (AP-42 Section 3.2-3, dated 7/00) by the units maximum capacity of 13.07 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4 and 6 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours and dividing by 2000 lbs/ton.

- c. **Emission Limitation:**
7.41 lbs CO/hr & 32.46 tons CO/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by the emissions testing as described in condition E.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours and dividing by

2000 lbs/ton.

- d. **Emission Limitation:**
3.70 lbs OC/hr & 16.21 tons OC/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 1.0 grams OC/hp-hr by the maximum capacity of 1680 hp and multiplying by 1.0 lb/453.6 grams. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4 and 18, 25 or 25a of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours and dividing by 2000 lbs/ton.

- e. **Emission Limitation:**
0.18 lb PE/hr & 0.83 ton PE/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.05 gram PE/hp-hr by the maximum capacity of 1680 hp and multiplying by 1.0 lb/453.6 grams. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours and dividing by 2000 lbs/ton.

- f. **Emission Limitation:**
Visible PE shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 9 of 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 03-13913

Facility ID: 0339020174

FACILITY NAME KNG ENERGY - Norwalk Compressor StationFACILITY DESCRIPTION natural gas transmission stationCITY/TWP CvnetEmissions Unit ID: **P002**SIC CODE 4923SCC CODE 2-02-001-02EMISSIONS UNIT ID P001EMISSIONS UNIT DESCRIPTION 1680 hp natural gas fired engine with catalytic reductionDATE INSTALLED 12/02

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		0.18	0.83	0.18	0.83
PM ₁₀					
Sulfur Dioxide		0.01	0.04	0.01	0.04
Organic Compounds		3.70	16.21	3.70	16.21
Nitrogen Oxides		7.41	32.46	7.41	32.46
Carbon Monoxide		7.41	32.46	7.41	32.46
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?

Y

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

\$ unk**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*?

X

YES

NO

IDENTIFY THE AIR CONTAMINANTS:

Formaldehyde

NEW SOURCE REVIEW FORM B

PTI Number: 03-13913

Facility ID: 0339020174

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Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

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Enter Determination

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Y

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

Sunk**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*?

X

YES

NO

IDENTIFY THE AIR CONTAMINANTS:

Formaldehyde