

**Synthetic Minor Determination and/or**  **Netting Determination**  
Permit To Install **01-08308**

A. Source Description

Quality Carriers has submitted a PTI to clean cargo tanks in Delaware County. The facility has two enclosed wash bay areas and a wastewater pre-treatment system.

Based on the hourly maximum capacity of the tank washing facility and assuming it operates 8760 hours per year, the facility would exceed Title V thresholds for Volatile Organic Compounds (VOC).

B. Facility Emissions and Attainment Status

The facility has a potential to emit as follows:

Emission Units	Emissions	Pre-Synthetic Minor (tons)	Post-Synthetic Minor (tons)
P001, P002, P003	VOC	110	9.0

C. Source Emissions

The pre-synthetic minor emissions assume that the facility operates at its maximum hourly capacity every hour of the year. The post synthetic minor emissions assume that VOC emissions are limited to 9.0 tons per rolling 12 month period.

D. Conclusion

This synthetic minor will effectively restrict the VOC emissions below Title V thresholds by limiting the emissions to 9.0 tons per rolling 12 month period. The operational restrictions including limitations on the first 12 months of operation, recordkeeping, reporting and testing requirements shall ensure that compliance with this permit is achieved and maintained.

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State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

**RE: DRAFT PERMIT TO INSTALL  
DELAWARE COUNTY  
Application No: 01-08308**

**DATE:** 4/10/2001

Quality Carriers Inc  
Jim Rakitsky  
150 East Pennsylvania Drive Suite 125  
Dowington, PA 19335

**CERTIFIED MAIL**

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$600** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA

CDO



**Permit To Install**

**Issue Date: To be entered upon final issuance**

**Terms and Conditions**

**Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 01-08308**

Application Number: 01-08308

APS Premise Number: 0121010237

Permit Fee: **To be entered upon final issuance**

Name of Facility: Quality Carriers Inc

Person to Contact: Jim Rakitsky

Address: 150 East Pennsylvania Drive Suite 125  
Dowington, PA 19335

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

**South Houk Rd and Pittsburgh Dr  
Delaware, Ohio**

Description of proposed emissions unit(s):

**Cargo tank cleaning building.**

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

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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 Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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 recordkeeping 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**

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

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- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 thirty (30) days after commencing operation of the source(s) covered by this permit.

**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>
VOC	9.0

**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>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Wash Bay Number One	OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions shall not exceed 30 lbs/hr.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-21-07(B)</p>
	OAC rule 3745-31-05(D)	See A.2.a below.
	OAC rule 3745-21-07(B)	<p>Fugitive VOC emissions shall be minimized by use of the latest available control techniques and operating practices in accordance with best current technology when draining residual product from the tanks.</p> <p>See II.B.2- II.B.3 below.</p>

**2. Additional Terms and Conditions**

- 2.a VOC emissions from emission units P001, P002 and P003 combined shall not exceed 9.0 tons per cumulative rolling, 12-month period.
- 2.b The 30 pounds per hour VOC limitation for this emissions unit was established to reflect the maximum hourly potential to emit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with this term.

## **B. Operational Restrictions**

1. The emissions of VOC from emissions units P001, P002 and P003 combined shall not exceed 9.0 tons per cumulative rolling, 12-month period.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table.

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of VOC (Tons)</u>
1	0.75
1-2	1.5
1-3	2.25
1-4	3
1-5	3.75
1-6	4.5
1-7	5.25
1-8	6
1-9	6.75
1-10	7.5
1-11	8.25
1-12	9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for VOC shall be based upon a cumulative rolling, 12 month summation of the monthly emissions.

Tanks shall be empty of all residual product in excess of normal adhesion to the tank wall before cleaning begins.

2. Residual product drained from the tank shall be stored in air tight containers.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each month for the tanks cleaned at the facility:
  - a. the company identification of the last transported product in each tank to be cleaned;
  - b. the constituents of each product;
  - c. the volume of each tank cleaned;
  - d. the number of tanks cleaned;

- e. the volumetric capacity of tanks that received a presolve wash;
- f. the VOC emissions from the presolve cleaning;
- g. the VOC emissions from the P001, P002 and P003 combined (lb/month); and
- h. the VOC emissions from P001, P002 and P003 added to the previous 11 months.

**D. Reporting Requirements**

The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12 month emission limitation for VOC and, for the first 12 calendar months of operation following the installation of this facility, all exceedances of the maximum allowable cumulative emission levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

**E. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:  
Volatile organic carbon (VOC) emissions shall not exceed 30.0 lbs/hour.

Applicable Compliance Method:

Compliance with this emission limit shall be demonstrated by multiplying the maximum number of tanks cleaned in an hour (3) by the pounds of VOC per tank cleaned of the product with the highest VOC emissions (9.67 lbs VOC/tank) added to the maximum pounds of VOC per tank cleaned with presolve rinse (0.30 lbs VOC/tank cleaned with presolve cleaner) multiplied by the maximum number of tanks cleaned in an hour (3).

VOC hourly emissions= 9.67lbs VOC/tank \* 3 tanks/hr + 0.30 lbs VOC/tank \* 3 tanks/hr  
VOC hourly emissions= 30.0 lbs/hr

- b. Emissions Limitation:  
VOC emissions shall not exceed 9.0 tons per cumulative rolling 12 month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by summing the monthly VOC emissions released from the tanks and the monthly VOC emissions from the presolve cleaning process [T + PCE] per rolling 12 month period, using the following equations.

Tank Emissions (T)

Monthly tank VOC emissions (T): Sum of the monthly VOC emissions from each product cleaned  $[\sum P_1 + P_2 + \dots + P_n]$

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**Emissions Unit ID: P001**

Product VOC emissions (P): Sum of the VOC emissions from the constituents of each product calculated monthly  $[\sum C_1 + C_2 + \dots + C_n]$

Constituent VOC emissions (C):  $[\% \text{ VOC} * \text{Molecular Weight (lb/lbmol)} * \text{Vapor Pressure (mmHg)} / \text{Temperature (K)} * \text{Gas Constant R (mmHg} * \text{ft}^3 / \text{K} * \text{lbmol)}] * \text{total volume of tanks cleaned containing that product each month (ft}^3/\text{month)}$

Presolve Cleaning Emissions (PCE)

VOC emissions from presolve cleaning should be calculated by multiplying the vapor pressure of the presolve solvent (0.88 mmHg) by the sum of the tank volume cleaned each month (ft<sup>3</sup>) by the molecular weight of the presolve cleaning material (118.175 lb/ lbmol). This figure should be divided by the gas constant R (998.9 mmHg \* ft<sup>3</sup> / K \* lbmol) multiplied by the temperature (298 K).

PCE= Presolve Cleaning Emissions (lb VOC /month)

PCE=  $[0.88 \text{ mmHg} * \text{sum of the tank volume cleaned each month- ft}^3/\text{month} * 118.175 \text{ lb/lbmol}] / [(998.9 \text{ mmHg} * \text{ft}_3 / \text{K} * \text{lbmol}) (298 \text{ K})]$

**F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

**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>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Wash Bay Number Two	OAC rule 3745-31-05(A)(3)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 30 lb/hr.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 6745-31-05(D) and OAC rule 3745-21-07(B).</p>
	OAC rule 3745-31-05(D)	See A.2.a below.
	OAC rule 3745-21-07(B)	<p>Fugitive VOC emissions shall be minimized by use of the latest available control techniques and operating practices in accordance with best current technology when draining residual product from the tanks.</p> <p>See II.B.2- II.B.3 below.</p>

2. **Additional Terms and Conditions**

- 2.a The emissions of VOC from units P001, P002 and P003 shall not exceed 9.0 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
- 2.b The 30 pounds per hour VOC limitation for this emissions unit was established to reflect the hourly potential to emit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with this term.

**B. Operational Restrictions**

1. The emissions of VOC from emissions units P001, P002 and P003 combined shall not exceed 9.0 tons per cumulative rolling, 12-month period.

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**Emissions Unit ID: P002**

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table.

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of VOC (Tons)</u>
1	0.75
1-2	1.5
1-3	2.25
1-4	3
1-5	3.75
1-6	4.5
1-7	5.25
1-8	6
1-9	6.75
1-10	7.5
1-11	8.25
1-12	9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for VOC shall be based upon a rolling, 12 month summation of the monthly emissions.

2. Tanks should be empty of all residual product in excess of normal adhesion to the tank wall before cleaning begins.
3. Residual product drained from the tank should be stored in closed containers.

### **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each month for the tanks cleaned at the facility:
  - a. the company identification of the last transported product in each tank to be cleaned;
  - b. the constituents of each product;
  - c. the volume of each tank cleaned;
  - d. the number of tanks cleaned;
  - e. the volumetric capacity of tanks that received a presolve wash;
  - f. the VOC emissions from the presolve cleaning;
  - g. the VOC emissions from the P001, P002 and P003 combined (lb/month); and
  - h. the VOC emissions from P001, P002 and P003 added to the previous 11 months.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12 month emission limitation for VOC and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

**E. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Volatile Organic Carbon (VOC) emission shall not exceed 25 lbs/hour.

Applicable Compliance Method:

Compliance with this emission limit shall be demonstrated by multiplying the maximum number of tanks cleaned in an hour (3) by the pounds of VOC per tank cleaned of the product with the highest VOC emissions (9.67 lbs VOC/tank) added to the pounds of VOC per tank cleaned with presolve rinse (0.30 lbs VOC/tank cleaned with presolve cleaner) multiplied by the maximum number of tanks cleaned in an hour (3).

VOC hourly emissions= 9.67lbs VOC/tank \* 3 tanks/hr + 0.30 lbs VOC/tank \* 3 tanks/hr

VOC hourly emissions= 30.0 lbs/hr

- b. Emissions Limitation:

VOC emissions shall not exceed 9.0 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by summing the monthly VOC emissions released from the tanks and the monthly VOC emissions from the presolve cleaning process [T + PCE] per rolling 12 month period, using the following equations.

Tank Emissions (T)

Monthly tank VOC emissions (T): Sum of the monthly VOC emissions from each product cleaned  $[\sum P_1 + P_2 + \dots + P_n]$

Product VOC emissions (P): Sum of the VOC emissions from the constituents of each product calculated monthly  $[\sum C_1 + C_2 + \dots + C_n]$

Constituent VOC emissions (C):  $[\% \text{ VOC} * \text{Molecular Weight (lb/lbmol)} * \text{Vapor Pressure (mmHg)} / \text{Temperature (K)} * \text{Gas Constant R (mmHg} * \text{ft}^3 / \text{K} * \text{lbmol)}] * \text{total volume of tanks cleaned containing that product each month (ft}^3/\text{month)}$

Presolve Cleaning Emissions (PCE)

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**Emissions Unit ID: P002**

VOC emissions from presolve cleaning should be calculated by multiplying the vapor pressure of the presolve solvent (0.88 mmHg) by the sum of the tank volume cleaned each month (ft<sup>3</sup>) by the molecular weight of the presolve cleaning material (118.175 lb/lbmol). This figure should be divided by the gas constant R (998.9 mmHg \* ft<sup>3</sup> / K \* lbmol) multiplied by the temperature (298 K).

PCE= Presolve Cleaning Emissions (lb VOC /month)

$$PCE = \frac{[0.88 \text{ mmHg} * \text{sum of the tank volume cleaned each month- ft}^3/\text{month} * 118.175 \text{ lb/lbmol}]}{[(998.9 \text{ mmHg} * \text{ft}_3 / \text{K} * \text{lbmol}) (298 \text{ K})]}$$

## **F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

**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>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - Wastewater treatment process to include holding tank, clarifier, flash mix tanks, separator and equalization tank	OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions shall not exceed 30 lb/hr.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).</p>
	OAC rule 3745-31-05(D)	See A.2.a below.

2. **Additional Terms and Conditions**

- 2.a The emissions of VOC from units P001, P002 and P003 shall not exceed 9.0 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
- 2.b The 30 pounds per hour VOC limitation for this emissions unit was established to reflect the hourly potential to emit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with this term.

**B. Operational Restrictions**

1. The emissions of VOC from emissions units P001, P002 and P003 combined shall not exceed 9.0 tons per cumulative rolling, 12-month period.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table.

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of VOC (Tons)</u>
1	0.75
1-2	1.5
1-3	2.25
1-4	3
1-5	3.75

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1-6	4.5
1-7	5.25
1-8	6
1-9	6.75
1-10	7.5
1-11	8.25
1-12	9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for VOC shall be based upon a rolling, 12 month summation of the monthly emissions.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each month for the tanks cleaned at the facility:
  - a. the company identification of the last transported product in each tank to be cleaned;
  - b. the constituents of each product;
  - c. the volume of each tank cleaned;
  - d. the number of tanks cleaned;
  - e. the volumetric capacity of tanks that received a presolve wash;
  - f. the VOC emissions from the presolve cleaning;
  - g. the VOC emissions from the P001, P002 and P003 combined (lb/month); and
  - h. the VOC emissions from P001, P002 and P003 added to the previous 11 months.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12 month emission limitation for VOC and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

**E. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:  
Volatile Organic Carbon (VOC) emission shall not exceed 30 lbs/hour.

Applicable Compliance Method:

Compliance with this emission limit shall be demonstrated by multiplying the maximum number of tanks cleaned in an hour (3) by the pounds of VOC per tank cleaned of the product with the highest VOC emissions (9.67 lbs VOC/tank) added to the pounds of VOC per tank cleaned with presolve rinse (0.30 lbs VOC/tank cleaned with presolve cleaner) multiplied by the maximum number of tanks cleaned in an hour (3).

VOC hourly emissions= 9.67lbs VOC/tank \* 3 tanks/hr + 0.30 lbs VOC/tank \* 3 tanks/hr  
VOC hourly emissions= 30.0 lbs/hr

- b. Emissions Limitation:  
VOC emissions shall not exceed 9.0 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by summing the monthly VOC emissions released from the tanks and the monthly VOC emissions from the presolve cleaning process [T + PCE] per rolling 12 month period, using the following equations.

Tank Emissions (T)

Monthly tank VOC emissions (T): Sum of the monthly VOC emissions from each product cleaned  $[\sum P_1 + P_2 + \dots + P_n]$

Product VOC emissions (P): Sum of the VOC emissions from the constituents of each product calculated monthly  $[\sum C_1 + C_2 + \dots + C_n]$

Constituent VOC emissions (C):  $[\% \text{ VOC} * \text{Molecular Weight (lb/lbmol)} * \text{Vapor Pressure (mmHg)} / \text{Temperature (K)} * \text{Gas Constant R (mmHg} * \text{ft}^3 / \text{K} * \text{lbmol)}] * \text{total volume of tanks cleaned containing that product each month (ft}^3/\text{month)}$

Presolve Cleaning Emissions (PCE)

VOC emissions from presolve cleaning should be calculated by multiplying the vapor pressure of the presolve solvent (0.88 mmHg) by the sum of the tank volume cleaned each month (ft<sup>3</sup>) by the molecular weight of the presolve cleaning material (118.175 lb/ lbmol). This figure should be divided by the gas constant R (998.9 mmHg \* ft<sup>3</sup> / K \* lbmol) multiplied by the temperature (298 K).

PCE= Presolve Cleaning Emissions (lb VOC /month)

PCE=  $[0.88 \text{ mmHg} * \text{sum of the tank volume cleaned each month- ft}^3/\text{month} * 118.175 \text{ lb/lbmol}] / [(998.9 \text{ mmHg} * \text{ft}_3 / \text{K} * \text{lbmol}) (298 \text{ K})]$

**Quality Carriers Inc**  
**PTI Application: 01-08308**  
**Issued: To be entered upon final issuance**

**Facility ID: 0121010237**  
**Emissions Unit ID: P003**

**F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08308

Facility ID: 0121010237

FACILITY NAME Quality Carriers Inc

FACILITY DESCRIPTION Cargo tank cleaning building. CITY/TWP Delaware

SIC CODE 4213 SCC CODE 4-90-004-99 EMISSIONS UNIT ID P001

EMISSIONS UNIT DESCRIPTION Wash Bay Number One

DATE INSTALLED \_\_\_\_\_ upon permit  
issue

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					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds		25	9.0	25	9.0
Nitrogen Oxides					
Carbon Monoxide					
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?

See additional terms and conditions

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? NO

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ \_\_\_\_\_

**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\*? \_\_\_\_\_ YES X NO

IDENTIFY THE AIR CONTAMINANTS: \_\_\_\_\_

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08308

Facility ID: 0121010237

FACILITY NAME Quality Carriers Inc

FACILITY DESCRIPTION Cargo tank cleaning building. CITY/TWP Delaware

SIC CODE 4213 SCC CODE 4-90-004-99 EMISSIONS UNIT ID P002

EMISSIONS UNIT DESCRIPTION Wash Bay Number Two

DATE INSTALLED \_\_\_\_\_ upon permit  
issue

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					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds		25	9.0	25	9.0
Nitrogen Oxides					
Carbon Monoxide					
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?

See additional terms and conditions

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ \_\_\_\_\_

**TOXIC AIR CONTAMINANTS**

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AIR TOXICS MODELING PERFORMED\*? \_\_\_\_\_ YES X NO

IDENTIFY THE AIR CONTAMINANTS: \_\_\_\_\_

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08308

Facility ID: 0121010237

FACILITY NAME Quality Carriers Inc

FACILITY DESCRIPTION Cargo tank cleaning building. CITY/TWP Delaware

SIC CODE 4213 SCC CODE 4-90-004-99 EMISSIONS UNIT ID P003

EMISSIONS UNIT DESCRIPTION Wastewater treatment process to include holding tank, clarifier, flash mix tanks, separator and equalization tank.

DATE INSTALLED \_\_\_\_\_ upon permit  
issue \_\_\_\_\_

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					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds		25	9.0	25	9.0
Nitrogen Oxides					
Carbon Monoxide					
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?

See additional terms and conditions

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ \_\_\_\_\_

**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\*? \_\_\_\_\_ YES X NO

IDENTIFY THE AIR CONTAMINANTS: \_\_\_\_\_