

## TITLE V APPLICATION REVIEW

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Facility Name: Williams Energy Ventures  
City: Doraville  
County: DeKalb  
AIRS #: 04-13-089-00085

Application #: TV- 9191

Date Application Received: January 4, 1999  
Date Application Deemed  
Administratively Complete: March 5, 1999  
Date of Draft Permit:  
Permit No: 5171-089-0085-V-01-0

Program	Review Engineers	Review Managers
SSPP/ASU	Curt Churchill	James Current
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### Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Title V operating permit. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being proposed pursuant to: (1) Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to Williams Energy Ventures and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the methods for determining compliance with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

**I. Facility Description**

A. Facility Identification

1. Facility Name Williams Energy Ventures
2. Parent/Holding Company Name Williams Energy Ventures
3. Previous and/or Other Names Phillips Pipe Line Company and Phillips Petroleum Company
4. Facility Location 4149 Winters Chapel Road  
Doraville, Georgia 30360
5. Attainment or Non-attainment Area Location

Facility is located in an area designated as non-attainment for ozone.

6. Class I Area Impacts

There are no Class I areas within 100 km of this facility.

B. Site Determination

There are no applicable issues with regard to the site determination. There are no other facilities which could be considered contiguous or adjacent and under common control.

C. Existing Permits

**Table 1: List of Current Permits, as Amended**

Permit Number and/or Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
		Yes	No
5171-089-0085-E-01-0	March 5, 1999	✓	
5171-044-10258	August 21, 1989, amended May 25, 1990	✓	

**Table 2: Comments on Specific Permits**

Permit Number	Comments
5171-089-0085-E-01-0 and 5171-044-10258	Ownership for this facility changed in November or December 1998. Williams, the new owner did not receive their operating permit for this facility until March 5, 1999. However, since they were submitting the Title V application in January, they listed permit number 5171-044-10258, which was the operating permit for the former owner, Phillips Pipe Line Company. This permit was voided by Williams' new permit.

D. Process Description

1. SIC Code(s)

Major - 5171  
Other - 4226

5171 is the SIC code for establishments primarily engaged in the wholesale distribution of petroleum products. It is from this activity that most of the air emissions from this facility are emitted. Williams Energy has expressed in interest in using the 4226 SIC Code over the traditional 5171 Code. 4226 represents petroleum and chemical bulk terminals for hire. However, for air quality permitting issues, 5171 is the preferred number. 4226 is listed above as another SIC code for this facility.

2. Description of Product(s)

Petroleum bulk storage and terminal operation.

3. Overall Facility Process Description

Petroleum products such as diesel fuel and gasoline are received by pipeline and stored in one of seven storage tanks at the facility. Two tanks have internal floating roofs, two have external floating roofs and three of the tanks have fixed roofs. The floating roof tanks are allowed to store gasoline or less volatile products. The large fixed roof tank, which has a capacity of about 2.3 million gallons, may only store less volatile products such as diesel fuel and kerosene. Two of the fixed roof tanks are for additive storage and have capacities of only about 10,000 gallons. Products from the storage tanks are dispensed to tanker trucks through loading racks. Emissions from this operation are controlled by a vapor combustor.

4. Overall Process Flow Diagram (optional) - Not included, see figure 3 of the application.

E. Regulatory Status

1. PSD/NSR

Total tank storage at this facility is approximately 8.5 million gallons, which is equal to a little less than 203,000 barrels. PSD regulations name petroleum storage facilities with total capacities of greater than 300,000 barrels as one of the 28 named categories of sources whose annual emissions make them a PSD major source if they exceed 100 tons. Since Williams Energy is below this threshold, potential annual emissions for a pollutant emitted by this facility would have to exceed 250 tons before it would be considered a major source for PSD purposes. Potential annual emissions of VOCs from this source have been calculated to be just under 190 tons. These calculations were made using the maximum allowable emission rates under the Georgia Rules for Air Quality Control and verified that this is a non-major source under PSD regulations.

However, this facility is located in DeKalb County which is part of the metro Atlanta ozone non-attainment area. Therefore, the NSR regulations would be applicable instead of PSD, since VOCs are the major pollutant emitted and this is one of the two pollutants regulated for ozone non-attainment areas.

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Williams would be considered major for NSR purposes since their potential VOC emissions exceed 50 tons per year. Their nitrogen oxide emissions however, are less than 50 tons per year. Nitrogen oxide is the second pollutant regulated for ozone non-attainment areas.

2. Title V Major Source Status by Pollutant

**Table 3: Title V Major Source Status**

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓			✓
PM <sub>10</sub>	✓			✓
SO <sub>2</sub>	n/a			✓
VOC	✓	✓		
NO <sub>x</sub>	✓			✓
CO	✓			✓
TRS	n/a			✓
H <sub>2</sub> S	n/a			✓
Individual HAP	✓			✓
Total HAPs	✓			✓

3. MACT Standards

This facility is not major for HAPs since potential total HAP emissions are only about 10 tons per year and no individual HAP is potentially emitted at a rate of more than 3 tons per year. The major source thresholds for total and individual HAPs are 25 and 10 tons respectively. Although Williams is below the major source HAP thresholds, applicability for 40 CFR Part 63, Subpart R (National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)) are determined by calculating a value for each facility. If the value of this emissions screening factor  $E_T$  is less than 1, the facility is not subject to subpart R. For Williams Energy,  $E_T$  has been calculated to be about 0.44. Although this value is well below the applicability threshold, Subpart R nevertheless requires the keeping of certain records to assure continued non-applicability. Although these record keeping requirements may be found in the permit, the facility is still considered exempt from Subpart R.

4. Program Applicability

Program Code	Applicable (Yes/No)
Program Code 6 - PSD	no
Program Code 8 - Part 61 NESHAP	no
Program Code 9 - NSPS	yes
Program Code M - Part 63 NESHAP	no, but must keep records
Program Code V - Title V	yes

**II. Facility Wide Requirements**

A. Emission and Operating Caps: Williams Energy has no facility wide emission or operating caps.

B. Applicable Rules and Regulations:

1. Facility Wide Federal Rule Standards

Williams Energy is not subject to any facility wide air quality rules other than the general provisions in Part VIII of the permit and the general provisions contained in Rule 391-3-1-.02(2)(a) and the general gasoline volatility Rule which applies to the entire metro Atlanta ozone nonattainment area. However, in order to ensure that they the MACT standard for Gasoline Distribution Facilities remains inapplicable, Williams must maintain records sufficient to establish that the value of  $E_T$ , the emissions screening factor, remains less than 1.0, as calculated using the equation provided in 40 CFR 63.420(a), where:

$$E_T = CF [0.59(T_F) (1-CE) + 0.17 (T_E) + 0.08 (T_{ES}) + 0.038 (T_I) + 8.5 \times 10^{-6} (C) + KQ ] + 0.04 (OE)$$

and the parameters in the equation have the following definitions:

$E_T$  = emissions screening factor for bulk gasoline terminals;

CF=0.161 for bulk gasoline terminals and pipeline breakout stations that do not handle any reformulated or oxygenated gasoline containing 7.6 percent by volume or greater methyl tert-butyl ether (MTBE), OR

CF=1.0 for bulk gasoline terminals and pipeline breakout stations that handle reformulated or oxygenated gasoline containing 7.6 percent by volume or greater MTBE;

CE=control efficiency limitation on potential to emit for the vapor processing system used to control emissions from fixed-roof gasoline storage vessels [value should be added in decimal form (percent divided by 100)];

$T_F$  = total number of fixed-roof gasoline storage vessels without an internal floating roof;

$T_E$  = total number of external floating roof gasoline storage vessels with only primary seals;

$T_{ES}$  = total number of external floating roof gasoline storage vessels with primary and secondary seals;

$T_I$  = total number of fixed-roof gasoline storage vessels with an internal floating roof;

C = number of valves, pumps, connectors, loading arm valves, and open-ended lines in gasoline service;

Q=gasoline throughput limitation on potential to emit or gasoline throughput limit (liters/day);

K =  $4.52 \times 10^{-6}$  for bulk gasoline terminals with uncontrolled loading racks (no vapor collection and processing systems), OR

K =  $(4.5 \times 10^{-9})(EF + L)$  for bulk gasoline terminals with controlled loading racks (loading racks that have vapor collection and processing systems installed on the emission stream);

EF=emission rate limitation on potential to emit for the gasoline cargo tank loading rack vapor processor outlet emissions (mg of total organic compounds per liter of gasoline load-ed);

OE=other HAP emissions screening factor for bulk gasoline terminals or pipeline breakout stations (tons per year). OE equals the total HAP from other emission sources not specified in parameters in the equations for ET or EP.

L = 13 mg/l for gasoline cargo tanks meeting the requirement to satisfy the test criteria for a vapor-tight gasoline tank truck in 40 CFR Part 60.501 of this chapter, *OR*

L = 304 mg/l for gasoline cargo tanks not meeting the requirement to satisfy the test criteria for a vapor-tight gasoline tank truck in 40 CFR Part 60.501 of this chapter.

2. Facility Wide SIP Rule Standards:

Because the facility is located in DeKalb county and they handle and store gasoline, the facility is subject to Georgia Rule for Air Quality Control 391-3-1-.02(2)(bbb). The requirements of this rule are as follows:

- a. Effective June 1, 1999, the Reid vapor pressure of the gasoline at the facility shall not exceed 7.0 psi. from June 1 to September 15. The facility may also blend ethanol into their gasoline, and if it is, the Reid vapor pressure shall not exceed 8.0 psi., the percent composition of the ethanol must be between 9 and 10 percent (not including any denaturing agent), and any document that accompanies the shipment of gasoline must state that the gasoline has ethanol and the percent composition.
- b. Effective April 1, 1999, the sulfur content of the gasoline shall not exceed an average 150 ppm (by weight).
- c. Effective April 1, 2003, the sulfur content of the gasoline shall not exceed an average 30 ppm (by weight).
- d. Effective April 1, 2003, the olefin content of the gasoline shall not exceed an average 4 percent (by weight).
- e. Effective April 1, 2003, the aromatic hydrocarbon content of the gasoline shall not exceed an average 22 percent (by weight).

C. Compliance Status: See Section VII.F.

D. Operational Flexibility: See Section VII.A.

E. Permit Conditions

A condition has been added into the permit which requires that the emissions screening factor  $E_T$  for the Gasoline Distribution Facilities MACT standard, 40 CFR 63, Subpart R, not exceed 1.0, in order to assure the continued nonapplicability of this regulation. The calculated value for the factor for this facility is only about 0.44, and realistically it could not change significantly without equipment changes at the facility that would first necessitate operating permit changes. With an  $E_T$  value of less than 0.5, the only requirement

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of Subpart R to assure continued nonapplicability is to calculate  $E_T$  to show it remains below 1.0, as has been required in condition 2.2.1. No other facility-wide conditions are included in the permit other than the general provisions in Part VIII, Rule 391-3-1-.02(2)(a), which applies to all air contaminant sources in the state and a condition requiring the facility to comply with the gasoline volatility requirements of Rule 391-3-1-.02(2)(bbb), which applies to all facilities which store gasoline in the metro Atlanta ozone nonattainment area.

Regarding the comments for permit condition changes contained in section 3.20 and 3.21 of the permit application, these comments are no longer valid since a new permit was issued to this facility in March 1999 (after the Title V application submittal), which voided the permit on which Williams comments were made. However, the conditions which they requested be deleted as having already been fulfilled, were left out of the new permit.

### III. Regulated Equipment Requirements

#### A. Brief Process Description

Williams Energy Ventures operates a bulk terminal with total storage capacity of approximately 8.5 million gallons. The facility emission sources consist of four main regulated storage tanks, one large fixed roof tank, two small additive tanks (for a total of 7 tanks), a truck loading rack with two bays, a vapor combustion unit (VCU), and various fugitives and insignificant activities. The terminal receives petroleum products by pipeline and ships out product by tank truck to retailers and bulk plants. Volatile organic compounds (VOC) and Hazardous Air Pollutant (HAP) emissions result primarily from loading trucks and storage tank losses.

#### B. Equipment List for the Process

Unit I.D.	Source Description	Pollutants Emitted	Applicable Rule/reg	Fed. Enf. ?
T301	Internal Floating Roof Tank	VOC, HAPs	391-3-1-.02(2)(bb), 40CFR 60, Subpart K	yes
T401	External Floating Roof Tank	VOC, HAPs	391-3-1-.02(2)(bb), (nn)	yes
T501	External Floating Roof Tank	VOC, HAPs	391-3-1-.02(2)(bb), (nn)	yes
T503	Internal Floating Roof Tank	VOC, HAPs	391-3-1-.02(2)(bb), 40CFR 60, Subpart Kb	yes
FLRK	Gasoline Loading Rack	PM, NO <sub>x</sub> , CO, VOC, HAPs	391-3-1-.02(2)(cc), (ss)	yes

#### C. Equipment & Rule Applicability

- Emission and Operating Caps - The vapor control system is required to maintain a 90 percent control efficiency and not have emissions which exceed 80 milligrams per liter of gasoline loaded at the terminal. These requirements are taken directly from Georgia Rule for Air Quality Control 391-3-1-.02(2)(cc) and apply to any gasoline terminal in the State which has an average daily throughput of gasoline of greater than 20,000 gallons.

- Applicable Rules and Regulations - Following is an overview of the specific rules and regulations that apply to this facility.

Georgia Rule (bb), applies to tanks T301, T401, T501 and T503, since each of these tanks has a capacity of more than 40,000 gallons and is capable of storing a product with a vapor pressure of greater than 1.52 psia (i.e. they are equipped with floating roofs). The only other tank at this facility which has a volume of greater than 40,000 gallons, Tank T502, has only a fixed roof and may not store the volatile products that would subject it to this Rule. Rule (bb) requires that these tanks be equipped with floating roofs.

Georgia Rule (cc), applies to all gasoline terminals in the State and covers the terminal or loading rack portion of this facility. Gasoline terminal is defined in the Rule as a facility which receives gasoline by pipeline, dispenses it to trucks and has an average daily throughput of greater than 20,000 gallons. Williams meets all of these criteria and must therefore, have a control system with an efficiency of at least 90 percent and an emission rate of no more than 80 milligrams per liter of gasoline loaded at the terminal.

Georgia Rule (nn), applies to storage tanks with storage capacities of greater than 40,000 gallons that are equipped with external floating roofs. Tanks T401 and T501 meet these criteria and must therefore, have secondary seals on their roofs.

Georgia Rule (ss), applies to any entity involved in the loading or unloading of gasoline into gasoline transport vehicles, which is Williams Energy's primary business at this facility. Williams must therefore, take steps to insure that they only load gasoline into tanker trucks that have passed a vapor tightness test to ensure that they do not leak. This Rule is also automatically applicable to any facility that is subject to Rule (cc).

40 CFR 60, Subpart K, is a federal standard of performance for petroleum storage vessels constructed after June 11, 1973 and prior to May 19, 1978 (when Subpart Ka would begin to apply) that have storage capacities of greater than 40,000 gallons. Tank T301 meets these criteria and as a result must be equipped with a floating roof.

40 CFR 60, Subpart Kb, is a federal standard of performance for petroleum storage vessels constructed after July 23, 1984 that have storage capacities of greater than 40 cubic meters (about 10,000 gallons). Tank T503 meets these criteria. In addition, the gasoline the facility is storing does not meet the maximum vapor pressure values for exemption from this rule. This tank must have the following equipment:

- i. The internal floating roof must be resting on the stored liquid at all times except during the brief times when the tank is completely emptied.
- ii. The internal floating roof must have either a foam- or a liquid mounted liquid-filled seal, a double seal, or a mechanical shoe seal.
- iii. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

- iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- v. Automatic bleeder vents shall be equipped with gaskets and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
- vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. These sample wells shall have slit fabric covers that cover at least 90 percent of their openings.
- viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

D. Compliance Status: See Section VII.F.

E. Operational Flexibility: See Section VII.A.

F. Permit Conditions

- 3.2.1 Requires a 90 percent control efficiency for the vapor control system, is required by Rule (cc) and is also taken from the existing permit.
- 3.2.2 Limits emissions from the vapor control system to 80 milligrams per liter of gasoline loaded, is required by Rule (cc) and is also taken from the existing permit.
- 3.3.1 Requires Tank T301 to comply with NSPS Subpart K and have a floating roof. This is an existing permit condition.
- 3.3.2 Requires Tank T503 to comply with NSPS Subpart Kb, which is an existing permit condition. However, the specific requirements of the regulation have been added into the permit.
- 3.4.1 A State only enforceable condition which was carried over from the existing permit. It has been included to reduce the standing and breathing losses from the gasoline storage tanks by reducing the amount of radiant solar energy transferred to the tank which raises the operating temperature of the tank.
- 3.4.2 Requires compliance with Rule (bb), a condition carried over from the existing permit.

- 3.4.3 Requires compliance with Rule (cc), another condition carried over from the existing permit, but with the actual requirements added into the permit.
- 3.4.4 Requires compliance with Rule (nn), another condition carried over from the existing permit, but with the actual requirements added into the permit.
- 3.4.5 Requires compliance with Rule (ss), as with condition 3.4.3, another condition carried over from the existing permit with the actual requirements added into the permit.
- 3.5.1 Requires routine maintenance on all air pollution control equipment and is condition 12 of the existing permit carried over without change.
- 3.5.2 Requires the keeping of a spare parts inventory for the control equipment and is condition 13 of the existing permit carried over without change.

**IV. Testing Requirements** (with Associated Record Keeping and Reporting)

The company is required to conduct a performance test at any specified emission point when so directed by the Environmental Protection Division (“Division”). The test results must be submitted within 30 days of the completion of the testing. Performance and compliance tests must be conducted and data reduced in accordance with applicable procedures and methods. Before any performance test is performed, a written notification and test plan will be submitted.

**V. Monitoring Requirements** (with Associated Record Keeping and Reporting)

Any monitoring system installed by the Permittee is required to be in continuous operation except during periods of repair. Maintenance and repair is required to be conducted in an expedient manner. The company is required to operate a heat sensing device, acceptable to the Director, such as a UV beam sensor or thermocouple, to continuously indicate and record the presence of a flame.

Written reports of deviations from this value and monitor malfunctions will be submitted for each calendar quarter. Each report will include: total process operating time, the magnitude of all deviations, corrective action, the nature, cause and duration of any malfunction.

In accordance with Rule (cc) and enhanced monitoring guidelines each calendar month the company will perform a leak inspection to seal/eliminate any leaks found in the vapor collection-processing systems or loading racks handling gasoline.

In accordance with Rule (ss) the permit requires the facility to monitor vapor tightness documentation for all tanker trucks loaded at the terminal, and is required to report when fuel is loaded in tanks that have not passed this test.

Tanks T503 will be inspected on a routine basis (each year or once each 10 years) to ensure that all equipment needed to contain VOL emissions is operating as designed or specified by regulation. And in accordance with 40 CFR Part 60.116b the permit requires the company to monitor the maximum true vapor pressure for this tank.

Files of all measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices. These files are required to be maintained for a period of at least five (5) years.

**VI. Other Record Keeping and Reporting Requirements**

Records are required to be retained for a period of five years. The records are required to be kept in a permanent form suitable for inspection and submission to the Division and EPA. The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all related information pertaining to deviations from applicable requirements.

**VII. Specific Requirements**

A. Operational Flexibility

Operational flexibility does not need to be incorporated into this Title V Permit. The applicant did not include any alternative operating scenarios in their Title V Application.

B. Alternative Requirements

There are no alternative requirements that need to be incorporated into the Title V Permit.

C. Insignificant Activities

Insignificant activities are listed in Attachment B of the permit and in section 4.10 and section 4.50 of the Title V permit application.

D. Temporary Sources

Williams Energy did not request the permitting of any temporary sources.

E. Short-Term Activities

Williams listed only filter changing and meter proving, activities which take only one hour to perform and occur only once every three to 24 years. Emission estimates for these activities are negligible and are given at the end of attachment 1 to the application.

F. Compliance Schedule/Progress Reports

The facility is considered to be in compliance with all Air Quality Regulations. Therefore, no compliance schedule or progress reports are necessary.

G. Emissions Trading

This facility is not involved in any emissions trading programs.

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### H. Acid Rain Requirements

This facility is not subject to any requirements of Title IV of the Clean Air Act Amendments (acid rain).

### I. Prevention of Accidental Releases

This facility has indicated that they have no substances which are stored in quantities above the threshold for the Accidental Release Prevention Program.

### J. Stratospheric Ozone Protection Requirements

The facility has indicated that they are not subject to Title VI requirements.

### K. Pollution Prevention

There are no pollution prevention provisions incorporated into this Title V Permit.

### L. Specific Conditions - None

## **VIII. General Provisions**

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

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**Closing Block:** We have reviewed and recommend issuance of draft Permit No. 5171-089-0085-V-01-0

Program	Review Engineers	Dates	Review Managers	Dates
SSPP/ASU				
SSCP/ASU				
ISMP				
TOXICS				

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**Stationary Source Permitting Program Manager**

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Date