

**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY  
Air Program**

33 North Stone Avenue, Suite 700 • Tucson, AZ 85701 • Phone: (520) 724-7400

**AIR QUALITY OPERATING PERMIT**

(As required by Title 17.12, Article II, Pima County Code)

**ISSUED TO**

**COSTCO WHOLESALE CORPORATION  
SERVICE STATION #407  
6255 EAST GRANT ROAD  
TUCSON, AZ 85712**

*This air quality operating permit does not relieve applicant of responsibility for meeting all air pollution regulations*

THIS PERMIT ISSUED SUBJECT TO THE SPECIFIC AND ADMINISTRATIVE CONDITIONS IDENTIFIED IN THIS PERMIT.

PDEQ PERMIT NUMBER **2213**

PERMIT CLASS **II**

ISSUED: **NOVEMBER 22, 2013**

EXPIRES: **NOVEMBER 22, 2018**



**Scott Porter, Environmental Quality Manager, PDEQ**

SIGNATURE

TITLE

**TABLE OF CONTENTS**

**Permit Summary** .....3

**Specific Conditions** .....4

    I.    Applicability .....4

    II.   Emission Limits and Standards.....4

    III.  Monitoring and Recordkeeping Requirements .....6

    IV.  Reporting Requirements .....7

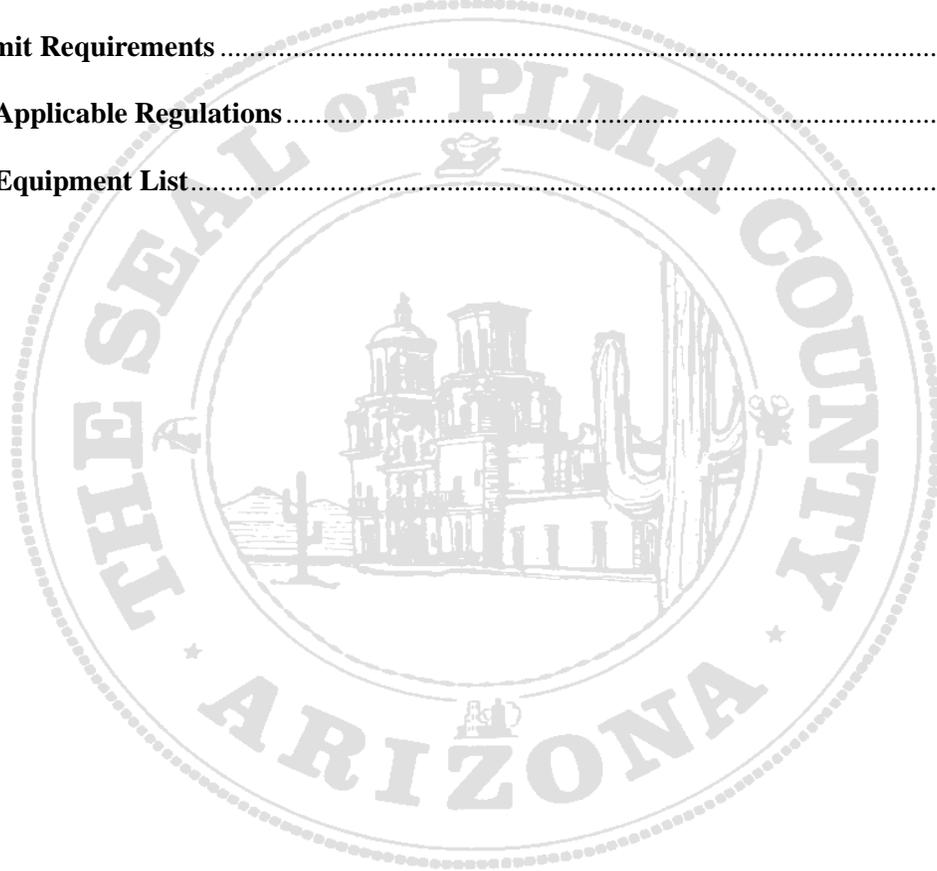
    V.   Testing Requirements .....7

    VI.  Facility Changes .....8

**Additional Permit Requirements** .....9

**Attachment 1: Applicable Regulations** .....10

**Attachment 2: Equipment List**.....11



## SUMMARY

This renewal Class II air quality operating permit is issued pursuant to Pima County Code (PCC) 17.12.140.B.2.b as Costco is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC). The Permittee was required to be and was in compliance with this federal regulation as of January 10, 2011.

The Costco gasoline service station is located at the Costco Wholesale Corporation shopping center in east Tucson. Costco sells high octane and low octane fuels. These fuels are seasonally adjusted, in accordance with Arizona State Department of Weights and Measures requirements, with oxygenation additives such as MTBE and Ethanol to reduce ambient air pollutants.

The station has three (3) 15,000 gallon and one (1) 30,000 gallon underground storage tanks (USTs) with Phase I vapor control as required by the new NESHAP regulations and Arizona State Law, feeding gasoline dispensing nozzles. The facility is not restricted by hours of operation and can thus operate 8760 hours per year (24 hours per day).

Costco continues to propose and accept a synthetic emission limit (voluntary throughput limit) of 15,000,000 gallons per year, previously calculated as a twelve month rolling total. This limit is greater than the 13, 850,000 gallon maximum limit required to qualify for a PDEQ General Permit, and exists to prevent Costco from becoming a major source of VOCs based on currently-used enforceable emission factors. Emission factors are taken from AP-42 and the ratio of Hazardous Air Pollutants (HAPs) in the Volatile Organic Compounds (VOC) vapors are taken from the January 1994 EPA Report "Gasoline Distribution Industry (Stage 1) - Background Information for Proposed Standards", Tables C-4 and C-5.

Typical gasoline station emissions comprise of VOCs and HAPs. No other criteria air pollutants are likely to be emitted in significant quantities. The following emission rates are for reference purposes only and are not intended to be enforced by direct measurement unless otherwise noted in the Specific Conditions of this permit.

<b>Pollutant</b>	<b>Potential To Emit (Tons per Year)</b>
Volatile Organic Compounds (VOC)	97.5
Carbon Monoxide (CO)	N/A
Nitrogen Oxides (NOx)	N/A
Particulate Matter (as PM <sub>10</sub> )	<1
Sulfur Oxides (SOx)	N/A
Hazardous Air Pollutants (Combined HAPs)	13.3

N/A Not Applicable

This gasoline service station is a Synthetic Minor source for VOCs and an area source for HAPs.

Gasoline, as used in this document, means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater which is used as fuel for internal combustion engines. Gallons, as used in this document, shall mean net gallons defined as the volume of gasoline corrected to a reference temperature of 60 degrees Fahrenheit.

The terms and conditions of this permit that are federally enforceable are specifically indicated as such.

## SPECIFIC CONDITIONS

[References are to Title 17 of the Pima County Code unless otherwise noted]

### I. APPLICABILITY

The facility covered by this permit constitutes a synthetic minor source of VOCs, an area source of HAPs and a true minor source of all other pollutants based on 8760 hours of operation per year and considering emissions from all emission sources of the same SIC Code at the facility. Equipment and operations specifically addressed by the permit are listed in Attachment 2 of the permit and fall under the following category:

Gasoline Service Station: All underground fuel storage tanks (USTs) and all associated equipment.

Affected Emission Source Classification: **Class II; Synthetic Minor Stationary Source of VOCs & HAPs.**

### II. EMISSION LIMITS AND STANDARDS

[PCC 17.12.185.A.2]

#### A. Operational Limitations

1. The Permittee shall remain subject to all requirements of this permit, even if the future **monthly** throughput falls below the applicable NESHAP thresholds. [40 CFR 63.1111(i)]  
**[Federally Enforceable & Material Permit Condition]**
2. The Permittee shall not cause, allow or permit the **yearly (365-day** rolling total) throughput of gasoline to exceed the declared 15,000,000 gallons without applying for a Class I, individual permit. [PCC 17.12.190.B]  
**[Federally Enforceable & Material Permit Condition]**

#### B. Air Pollution Controls

1. The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to the following: [40 CFR 63.1116(a)]  
**[Federally Enforceable & Material Permit Condition]**
  - a. Minimize gasoline spills;
  - b. Clean up spills as expeditiously as practical;
  - c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. Portable gasoline containers that meet the requirement of 40 CFR 59, subpart F, are considered acceptable for compliance; [40 CFR 63.1116(d)]
  - d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/waste separators.
2. When loading gasoline into the storage tanks, the Permittee shall use submerged filling where the fill pipe is not more than 6 inches from the bottom of the tank. [40 CFR 63.1117(b)]  
**[Federally Enforceable & Material Permit Condition]**

3. The Permittee shall operate a vapor balance system during gasoline storage tank loadings using the following management practices: [40 CFR 63.11118(b)(1) & 40 CFR 63 Subpart CCCCC, Table1]

**[Federally Enforceable & Material Permit Condition]**

- a. All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
- b. The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight where vapor-tight is defined as:

*“... equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.”*

- c. The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer. The vapor recovery and product adaptors, and the method of connection with the delivery elbows, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
- d. If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in II.B.3 of the Specific Conditions.
- e. Liquid fill connections for all systems shall be equipped with vapor-tight caps.
- f. Pressure-vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water
- g. The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:

$$P_f = 2e^{-500887/v}$$

Where:

- $P_f$  = Minimum allowable final pressure, inches of water;  
 $v$  = Total ullage affected by the test, gallons;  
 $e$  = Dimensionless constant equal to approximately 2.718;  
 $2$  = Initial pressure, inches of water

- h. Equip storage tanks constructed after November 9, 2006 with a dual-point vapor balance system, defined in 40 CFR 63.11132 as having one entry port for filling and a separate exit port for a vapor connection

### III. MONITORING AND RECORDKEEPING

[PCC 17.12.185.A.3 & 4]

#### A. Operational Limitations

1. The Permittee must, at all times, including periods of startup, shutdown, and malfunction, operate and maintain the GDF, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

[40 CFR 63.6(e)(1)(i) & 40 CFR 63, Subpart CCCCC, Table 3]

**[Federally Enforceable Condition]**

2. The Permittee shall provide proof of throughput upon request by the Control Officer.

[40 CFR 63.1111(e)]

**[Federally Enforceable Condition]**

3. **Yearly** throughput shall be a **365-day** rolling total, calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks during the previous 364 days. **Monthly** throughput shall be calculated using the **yearly** throughput and dividing that sum by 12.

[40 CFR 63.11132]

**[Federally Enforceable & Material Permit Condition]**

#### B. Air Pollution Controls

1. The Permittee shall annually inspect the gasoline storage tanks' submerged fill devices. The inspections shall be used to determine whether all of the submerged fill devices are in good working order, according to good modern practices and any available industry practices or recommendations.

[PCC 17.12.185.A.3.c]

**[Material Permit Condition]**

2. The Permittee shall annually inspect the vapor control recovery system(s), all pumps compressors, pipes, hoses mechanical seals or other equipment storing, handling, conveying or controlling VOCs and HAPs. The inspections shall be used to determine whether all equipment is in good working order according to good modern practices and any available manufacturer's recommendations.

[PCC 17.12.185.A.3.c]

**[Material Permit Condition]**

#### C. Recordkeeping

1. Recordkeeping to document throughput must date back to January 10, 2008. These records shall be kept for a period of five (5) years.

[40 CFR 63.1111(e)]

**[Federally Enforceable]**

2. The Permittee shall record the results of inspections in III.B.1 & 2 in a log showing the following information:

[PCC 17.12.185.A.3.c]

**[Material Permit Condition]**

- a. Identification of the device inspected;
- b. The date of the inspection;
- c. The results of the inspection;
- d. Any corrective action taken as a result of the inspection.

3. The Permittee shall keep records of all tests performed under Section V of the Specific Conditions, including details of the conditions under which the tests were performed. The test records shall be kept for a period of five (5) years and shall be made available for inspection by the Control Officer during the course of a site visit or inspection.  
[40 CFR 63.11125 & 40 CFR 63.11120(c)]  
**[Federally Enforceable Condition]**
4. All other records required by this permit shall be maintained for a minimum of five (5) years including all records that may be necessary to demonstrate compliance with the permit or Pima County Code Title 17.  
[PCC 17.12.185.A.4.b]

#### IV. REPORTING REQUIREMENTS

- A. The Permittee must submit a Notification of Performance Test prior to initiating testing required in V.A of the Specific Conditions.  
[40 CFR 63.9(e) & 40 CFR 63.11124(b)(4)]  
**[Federally Enforceable Conditions]**  
  
*40 CFR 63.9(e) reads as follows: The owner or operator of an affected source shall notify the Control Officer in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Control Officer to review and approve the site-specific test plan required under §63.7(c), if requested by the Control Officer, and to have an observer present during the test.*
- B. The Permittee shall submit a Notification of Compliance Status within 60 days of the completion of testing required in V.A of the Specific Conditions. The Notification must be signed by the responsible official who must certify its accuracy and must indicate whether the source has complied with the applicable requirements.  
[40 CFR 63.11124(b)(2) & 40 CFR 63.9(h)(2)(ii)]  
**[Federally Enforceable Condition]**
- C. The Permittee shall report the results of all volumetric efficiency tests required under V.A of the Specific Conditions. These reports must be submitted within 180 days of the completion of the performance testing.  
[40 CFR 63.11126]  
**[Federally Enforceable Condition]**
- E. Upon exceeding 90 tons of VOC (13,850,000 gallons of gasoline throughput) in any 365-day rolling total, the Permittee shall submit a notification within 3 business days.  
[PCC 17.12.185.A.2 & PCC 17.12.185.A.5]
- D. When requested by the Control Officer, the Permittee shall complete and submit an annual emissions inventory questionnaire. The questionnaire is due ninety days after the Control Officer makes a written request and shall include emission information for the previous calendar year. The questionnaire shall be on a form provided by or approved by the Control Officer and shall include the information required by PCC 17.12.320.  
[PCC 17.12.320]

## V. TESTING REQUIREMENTS

A. The Permittee shall demonstrate initial compliance and repeat that compliance demonstration every 3 years thereafter, by complying with the performance test requirements below:

1. Leak Rate and Cracking Pressure Testing

The Permittee must demonstrate compliance with the leak rate and cracking pressure requirements, specified in II.B.3.f of the Specific Conditions, for PV vent valves installed on all gasoline storage tanks using one of the following test methods: [40 CFR 63.11120(a)(1)]

**[Federally Enforceable & Material Permit Condition]**

- a. The California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,-Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see 40 CFR 63.14).
- b. Alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f).

2. Static Pressure Performance Testing

The Permittee must demonstrate compliance with the static pressure performance requirement, specified in II.B.3.g of the Specific Conditions, for the vapor balance system by conducting a static pressure test on all gasoline storage tanks using one of the following test methods:

[40 CFR 63.11120(a)(2)]

**[Federally Enforceable & Material Permit Condition]**

- a. California Air Resources Board Vapor Recovery Test Procedure TP-201.3-Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see § 63.14).
- b. Alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f).

3. The initial compliance demonstration tests must be conducted no later than July 10, 2011.

[40 CFR 63.11113(e)]

**[Federally Enforceable & Material Permit Condition]**

B. Performance tests conducted as specified in V.A shall be conducted under normal operating conditions of the source.

[40 CFR 63.11120(c)]

**[Federally Enforceable & Material Permit Condition]**

## VI. FACILITY CHANGES

Should the Permittee desire to change the facility or operations in any way (including, but not limited to, addition of new equipment, modification of current equipment or usage of fuels not specified within this permit), the Permittee shall first submit the proper notifications and follow the required permit revision procedure pursuant to PCC 17.12.240, PCC 17.12.255, or PCC 17.12.260.

**ADDITIONAL PERMIT CONDITIONS**

**I. COMPLIANCE WITH PERMIT CONDITIONS**

[PCC 17.12.185.A.7.a & b]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. The report shall be in 2 parts as specified below: [PCC 17.12.185.A.5 & PCC 17.12.040]
1. Notification by telephone or facsimile within 24 hours of the time the Permittee first learned of the occurrence of excess emission that includes all available information pursuant to PCC 17.12.040.B. To report excess emissions call **520-724-7400** or fax to **520-838-7432**.
  2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification in I.B.1 above. **Send to PDEQ 33 N. Stone Ave, Ste 700, Tucson, Arizona 85701.**
- C. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. The permit does not convey any property rights of any sort, or any exclusive privilege to the permit holder.
- E. The Permittee shall pay fees to the Control Officer pursuant to PCC 17.12.520. [PCC 17.12.185.A.8 & PCC 17.12.520]

**II. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE**

[PCC 17.12.185.A.7.c]

The permit may be revised, reopened, revoked and reissued, or terminated for cause pursuant to PCC 17.12.270. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

**III. DUTY TO PROVIDE INFORMATION**

[PCC 17.12.165.G & PCC 17.12.185.A.7.e]

- A. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records to the Control Officer along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

**IV. SEVERABILITY CLAUSE**

[PCC 17.12.185.A.6]

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.

**ATTACHMENT 1**

**APPLICABLE REGULATIONS**

**Requirements Specifically Identified as Applicable**

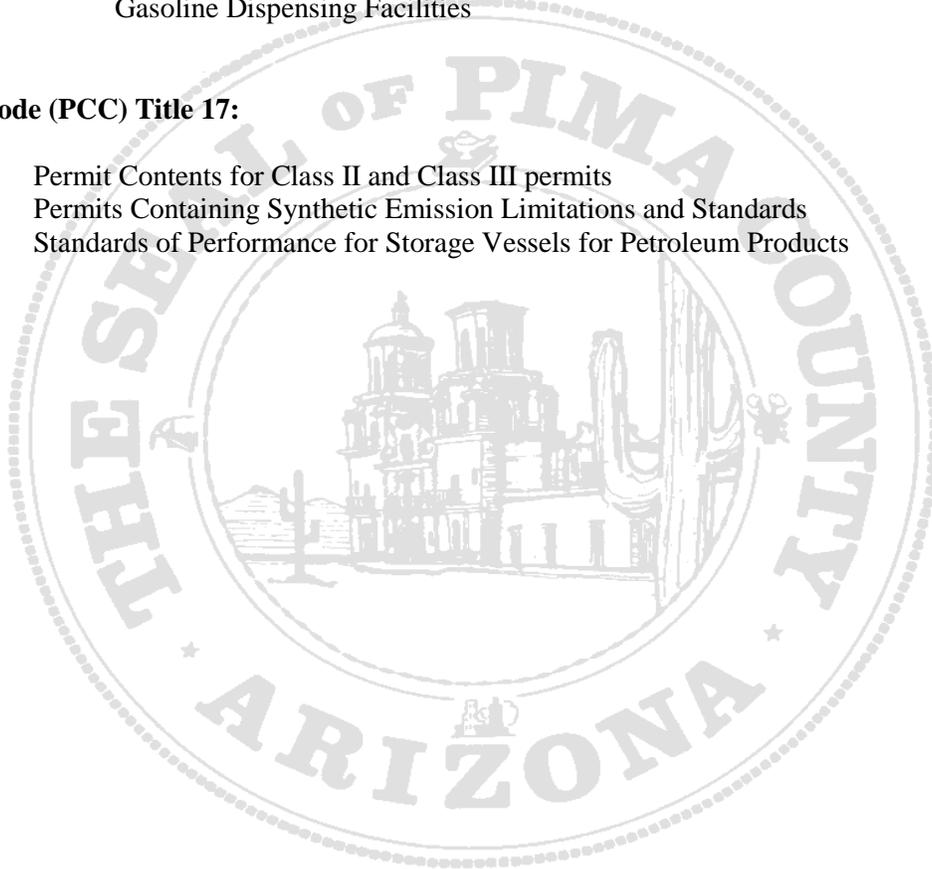
Compliance with the terms contained in this permit shall be deemed compliance with the following non-federally applicable requirements in effect on the date of permit issuance:

**Code of Federal Regulations (CFR) Chapter 40 Part 63:**

Subpart CCCCCC National Emission Standards for Hazardous Air Pollutants for Source Categories:  
Gasoline Dispensing Facilities

**Pima County Code (PCC) Title 17:**

17.12.185 Permit Contents for Class II and Class III permits  
17.12.190 Permits Containing Synthetic Emission Limitations and Standards  
17.16.230 Standards of Performance for Storage Vessels for Petroleum Products



**ATTACHMENT 2**

**EQUIPMENT LIST**

1. Three 15,000 gallon USTs.
2. One 30,000 gallon UST.
3. Phase I Vapor Control Equipment.
4. Fuel Dispensing and Associated Equipment.

