State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
LORAIN COUNTY

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: 02-17598

DATE: 3/6/2003

Costco Gasoline
Kim Sanford
999 Lake Drive
Issaquah, WA 98027

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

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

cc: **NEDO**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install	**Issue Date: 3/6/2003**
Terms and Conditions	**Effective Date: 3/6/2003**

FINAL PERMIT TO INSTALL 02-17598

Application Number:	02-17598
APS Premise Number:	0247020995
Permit Fee:	**$200**
Name of Facility:	Costco Gasoline
Person to Contact:	Kim Sanford
Address:	999 Lake Drive Issaquah, WA 98027

Location of proposed air contaminant source(s) [emissions unit(s)]:
35804 Detroit Rd
Avon, **Ohio**

Description of proposed emissions unit(s):
Gasoline dispensing facility with Stage I and II controls.

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

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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

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.

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

Pollutant	Tons Per Year
OC	10.6

Emissions Unit ID: **G001**

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
G001 - Gasoline Dispensing Facility	OAC rule 3745-31-05(A)(3)	10.6 tons organic compounds (OC)/year
gasoline storage tank(s): three (3), 20,000 gallon underground storage tank(s)	OAC rule 3745-21-09(R)	Stage I vapor control - 90% control efficiency for volatile organic compounds (VOCs), submerged fill
gasoline dispensing operation: twelve (12) nozzles, Stage II vapor recovery	OAC rule 3745-21-09(DDD)	Stage II vapor control - 95% control efficiency for VOCs

2. Additional Terms and Conditions

2.a Pursuant to OAC rule 3745-21-09 (DDD)(1)(b), the Stage II vapor control system shall be installed, operated, and maintained in accordance with the applicable certification granted by the California Air Resources Board (CARB) as described in Part II, Section F below.

Any figures or exhibits identified in this permit are available from the appropriate Ohio EPA District Office or local air agency upon request.

B. Operational Restrictions

1. The permittee shall comply with the following operational restrictions for the Stage I vapor control system:

a. The vapor balance system shall be kept in good working order and shall be used at all times during the transfer of gasoline.

b. There shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers.

c. There shall be no leaks in the vapor lines or liquid lines during the transfer of gasoline.

d. The transfer of gasoline from a delivery vessel to a stationary storage tank shall be conducted by use of submerged fill into the storage tank. The submerged fill pipe(s) are to be installed so they are within six (6) inches of the bottom of the storage tank.

e. All fill caps shall be "in place" and clamped during normal storage conditions.

f. The permittee shall repair within 15 days any leak from the vapor balance system or vapor control system which is employed to meet the requirements of paragraph (R)(1) of OAC rule 3745-21-09 when such leak is equal to or greater than 100 percent of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10.

2. The permittee shall comply with the following operational restrictions for the Stage II vapor control system:

a. The vapor control system shall be installed, operated and maintained in accordance with the manufacturer's specifications and the applicable certification granted by the CARB, and shall be free of the following defects:

i. Any component, that is required to be employed at all times pursuant to the system certification granted by the CARB, is absent or disconnected.

ii. A vapor hose is crimped or flattened such that the vapor passage is blocked, or the pressure drop through the vapor hose exceeds by a factor of two or more the requirements in the certification granted by the CARB.

iii. A vacuum producing device is inoperative or malfunctioning.

iv. Pressure/vacuum relief valves, vapor check valves, or dry breaks are inoperative.

v. Any vapor recovery equipment is leaking liquid gasoline or gasoline vapors.

vi. Any other equipment defect identified in the CARB certification as one which substantially impairs the effectiveness of the vapor control system.

b. The vapor control system must have successfully passed the testing requirements contained in paragraph (DDD)(2) of OAC rule 3745-21-09. These testing requirements are also specified in Part II, Section E and Part II, Section F.6.

c. Operating instructions for the vapor control system shall be conspicuously posted in each gasoline dispensing area. The operating instructions shall clearly describe how to properly fuel motor vehicles and shall specifically prohibit the topping off of the motor vehicle fuel tank.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain records of the results of any leak checks, including, at a minimum, the following information:

a. Date of inspection.

b. Findings (may indicate no leaks discovered or location, nature, and severity of each leak).

c. Leak determination method.

d. Corrective action (date each leak repaired and reasons for any repair interval in excess of 15 calendar days).

e. Inspector's name and signature.

2. The permittee shall maintain records of the following information:

a. The quantity of gasoline delivered to the facility during each calendar month.

b. The results of any tests performed pursuant to the testing requirements specified in this permit.

c. A log of the date and description of all repair and maintenance work performed (including, but not limited to, work performed to meet manufacturer's specifications or CARB certification requirements), or any other modifications made to the vapor control system.

d. A copy of the most recent permit to operate application (including appendix) submitted to the Ohio EPA.

e. A copy of the most recent permit to operate issued by the Ohio EPA.

f. Proof of attendance and completion of the training required by the Ohio EPA for the operator or local manager of the gasoline dispensing facility.

g. Copies of all completed post test inspection forms.

3. The permittee shall maintain records of the annual gasoline throughput for the facility.

D. Reporting Requirements

1. Any leak from the vapor balance system or vapor control system that is not repaired within 15 days after identification shall be reported to the Director within 30 days after the repair is completed.

2. A comprehensive written report on the results of any tests performed in accordance with the requirements of this permit shall be submitted within 30 days following the completion of the tests.

E. Testing Requirements

1. The Stage II vapor control system must successfully meet all requirements regarding testing contained in OAC rule 3745-21-09(DDD)(2). In accordance with the test procedures listed in OAC rule 3745-21-10, the following tests shall be performed: static leak test and dynamic pressure performance test.

At intervals not to exceed five (5) years, the permittee shall repeat and demonstrate compliance with the static leak test requirements contained in OAC rule 3745-21-10, Appendix A (unless a greater frequency is specified in the applicable CARB certification), and the dynamic pressure performance test requirements contained in OAC rule 3745-21-10, Appendix B (unless the dynamic pressure performance test is not applicable to the specific Stage II vapor control system, as specified in the applicable CARB certification).

Not later than thirty (30) days prior to any required tests, the permittee shall submit a test notification to the appropriate Ohio EPA District Office or local air agency.

The test notification shall describe the proposed test methods and procedures, the time and the date of the tests, and the person who will be conducting the tests. Failure to submit such notification prior to the tests may result in the Ohio EPA's refusal to accept the results of the

tests. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information during the tests. After completion of any tests, the permittee shall complete and retain on site a copy of the post test inspection form contained in OAC rule 3745-21-10, Appendix C.

2. Compliance with the annual organic compound (OC) emission limit in Section A.1. of these terms and conditions shall be calculated as the sum of the OC emissions from all gasoline storage tank filling and dispensing operations and, if applicable, diesel, kerosene, and used oil tank filling operations at the gasoline dispensing facility (unless otherwise exempted pursuant to OAC rule 3745-31-03). This calculation shall be based on the annual gasoline, diesel, kerosene, and used oil throughputs for the facility using the calculation and emission factors below.

a. Emission Limitation: 10.6 tons OC/year.

b. Applicable Compliance Method: multiply the appropriate emission factor below by the gallons of gasoline, diesel, kerosene, or used oil dispensed per year and divide by 2000 lbs/ton. Repeat this calculation for each material dispensed at the facility and sum the results to yield the total annual OC emission rate.

(Emission rates (factors) are expressed in pounds (lbs) of organic compounds per 1000 gallons of gasoline throughput. Emission factors are for VOC as well as total organic compound (OC) emissions, because the methane and ethane content of gasoline is negligible.)

i. Emission factors for gasoline storage tank filling and dispensing operations:

(a) Gasoline dispensing facility has submerged tank filling for gasoline storage tanks: OC emission factor = 20.0 lbs OC/1000 gallons.

(b) Gasoline dispensing facility has submerged tank filling with Stage I vapor control for gasoline storage tanks: OC emission factor = 13.0 lbs OC/1000 gallons.

(c) Gasoline dispensing facility has submerged tank filling with Stage I vapor control for gasoline storage tanks and Stage II vapor control for vehicle refueling: OC emission factor = 3.1 lbs OC/1000 gallons.

(Gasoline emission factors are from USEPA publication AP-42, Fifth Edition, Table 5.2-7)

ii. Emission factors for diesel, kerosene, and used oil tank filling operations:

(a) Gasoline dispensing facility has submerged tank filling for diesel, kerosene, and used oil tank filling operations: OC emission factor = 0.027 lb OC/1000 gallons.

(This emission factor is the SCC emission factor for transfer operations from diesel storage tanks. It is assumed that the same emission factor applies to kerosene and used oil transfer operations.)

F. Miscellaneous Requirements

1. The Gilbarco VaporVac Stage II vapor recovery system employed at this facility, including all associated underground and aboveground plumbing, shall be installed, operated, and maintained in accordance with CARB Executive Order G-70-150-AB, which includes, but is not limited to, the requirements contained within this Section.

2. The permittee shall comply with the following design and installation specifications from CARB Executive Order G-70-150-AB:

a. The equipment approved for use with the Gilbarco VaporVac system is specified in Exhibit 1 of Executive Order G-70-150-AB. Other equipment may not be used unless approved by CARB for use with the Gilbarco VaporVac system.

b. The maximum length of the coaxial hose shall be fifteen (15) feet, and the maximum allowable length of hose which may be in contact with the top of the island block, or ground, shall be six (6) inches.

c. Each vent pipe shall be equipped with a CARB certified pressure/vacuum relief valve. Plumbing may be manifolded to reduce the number of relief valves needed. The vent manifold may be used as an alternative to an underground manifold only in existing installations where vapor piping is already installed.

d. The settings of the pressure/vacuum relief valve(s) shall be as follows:

i. Pressure: Three (3.0) +/- one-half (0.5) inches of water column

ii. Vacuum: Eight (8.0) +/- two (2.0) inches of water column

e. A threaded tap at least 1/8 inch NPT shall be installed in one vent pipe, at least six (6) feet above grade and not exceeding eight (8) feet above grade. This tap shall remain plugged

and vapor tight except when test equipment is being connected or removed.

f. Coaxial Stage I vapor recovery systems shall not be used with new installations of the Gilbarco VaporVac system. Coaxial Stage I systems may be used with existing installations if:

i. The existing coaxial Stage I system is a poppeted, CARB certified system.

ii. The installation of the Stage II system requires no modification of the underground storage tank(s) (UST(s)) and/or connections.

iii. The existing coaxial Stage I equipment is in good working order and has demonstrated compliance with Static Leak Test criteria when tested with all fill caps removed.

3. The permittee shall comply with the following operational restrictions from CARB Executive Order G-70-150-AB:

a. The Gilbarco VaporVac system shall be maintained in accordance with the System Operating Manual approved by CARB. Any alteration of the equipment, parts, design, or operation of the system is prohibited unless approved by CARB.

b. The maximum dispensing rate shall not exceed ten (10.0) gallons per minute (gpm). Compliance with this condition shall be verified with only one nozzle in operation per product supply pump.

c. No dispensing shall be allowed when the vapor collection pump is disabled for maintenance or for any reason. Only those nozzles affected by the disabled vapor pump are subject to this condition.

d. The following conditions shall halt or inhibit the operation of one side of the dispenser while allowing the other side to operate:

i. Excessive vapor pump motor current.

ii. Failure of vapor pump to start while fuel is being dispensed.

iii. Vapor pump activity during idle periods.

iv. Maximum permissible pump speed exceeded.

v. Disconnection or accidental swapping of Side A/B vapor pumps.

e. The following conditions shall shut down the entire dispenser:

i. Failure or loss of the Gilbarco VaporVac system power supply.

ii. A/C line fuse opens.

iii. Cabling/wiring missing or disconnected.

f. Vapor collection holes in the nozzle spout shall remain unblocked. Any nozzle with fewer than four (4) unblocked vapor collection holes is defective and shall be immediately removed from service.

4. The permittee shall comply with the following performance specification from CARB Executive Order G-70-150-AB:

The air-to-liquid ratio (A/L) shall be between 1.00 and 1.25 when tested in accordance with an A/L test procedure adopted by the Ohio EPA.

5. The permittee shall comply with the following monitoring requirement from CARB Executive Order G-70-150-AB:

The permittee shall monitor the Stage II vapor recovery system performance and all aspects of operation to the extent necessary to ensure compliance with the conditions and specifications contained within this Section.

6. The permittee shall comply with the following testing requirement from CARB Executive Order G-70-150-AB:

In accordance with the yearly static pressure decay testing requirement specified in CARB Executive Order G-70-150-AB, the Static Leak Test contained in OAC rule 3745-21-10, Appendix A, shall be successfully conducted at least once in each twelve- consecutive-month period after the date of successful completion of the startup or most recent Static Leak Test. The appropriate Ohio EPA District Office or local air agency shall be notified at least 30 days prior to conducting these annual tests. Test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days of testing.

7. The permittee shall comply with the following record keeping requirement from CARB Executive

Order G-70-150-AB:

A log of the date and description of all repair and maintenance work performed on the Gilbarco VaporVac system shall be maintained on site or otherwise provided to Ohio EPA field office personnel immediately upon request.

NEW SOURCE REVIEW FORM B

PTI Number: 02-17598 Facility ID: 0247020995

FACILITY NAME Costco Gasoline

FACILITY DESCRIPTION Gasoline dispensing facility with Stage I and II controls CITY/TWP Avon

SIC CODE 5541 SCC CODE 4-06-003-01 EMISSIONS UNIT ID G001

EMISSIONS UNIT DESCRIPTION Gasoline Dispensing Facility

DATE INSTALLED 12/01/02

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					
PM_{10}					
Sulfur Dioxide					
Organic Compounds			5.3		10.6
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?
BAT consists of Stage I and Stage II Vapor Recovery System

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 contaiminants 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: _____