San Joaquin Valley
Unified Air Pollution Control District

Guidelines for Expedited Application Reviews (GEAR)
Motor Vehicle Refueling Permit Processing Guidelines

Approved by: Signed Date : 12/18/97
Seyed Sadredin
Director of Permit Services

Purpose: To outline the procedures for expedited processing of Authority to Construct (ATC) applications for service stations and other motor vehicle refueling facilities. These procedures will apply to processing of applications over the counter or through the mail.

I. Applicability

- Gasoline dispensing for motor vehicles only;
- Facilities equipped with Phase I and Phase II vapor control systems;
- Both underground and aboveground tank systems.

II. Permit Application and Supplemental Forms

The applicant must complete a regular ATC application form and the Gasoline Dispensing Supplemental Form (Attachment I).

III. Priority Processing

The applications will be processed on an expedited basis if a complete application, a complete supplementary form, and a $60 filing fee for each facility are submitted.

In order to meet the expedited time frame, the engineer assigned for preliminary review will deem the application complete (if appropriate), write the application review, and finalize the project. The application review and final ATC will be submitted to the supervisor or manager for review and signature.

Final action on over-the-counter projects will occur within one hour after the submittal of the complete application. If all necessary items are provided through the mail, the application will be prioritized for issuance within one week.

The priority processing will be preempted if:

- The application is subject to any public noticing requirements, including school notice per CH&SC 42301.6 (within 1000 feet of a K-12 school), or
- The application is part of a stationary source project where issuance of the permit will affect the outcome of the stationary source project.

IV. Application Review

In order to standardize the application reviews for this source category, the application review found in [G:/per/gear/gdf.doc] will be used as a base document. The following pages are a hard-copy version of this standard review. This hard-copy version for the GEAR Policy Manual includes a copy of the required supplemental application form (Attachment I), the up-to-date BACT analysis (Attachment II), the standard ATC conditions (Attachment III), a simplified checklist (Attachment IV), and a summary of generic NSR emission calculations (Attachment V). These attachments will be referred to, but will not be included in the actual application review done for a specific application. The actual application review will only include the draft ATC conditions as attachment to the review. This will minimize the number of pages for the expedited application review.

To ensure 1-hour turnaround time for over-the-counter processing, the simplified checklist will be used. The standard application review may be performed later to minimize processing time. In addition, the use of a generic emission calculations summary may also minimize the length of the standard application review.

The use of this Application Review will ensure:

A. That the proposed project complies with the Best Available Control Technology (BACT) requirement as specified in the District's current BACT Clearinghouse.

B. That the proposed project will not trigger emission offset requirements.

C. That the PTO has enforceable daily emission limitations (DELs).

D. That the proposed vapor recovery systems comply with the applicable certification requirements and other applicable prohibitory rules.

The generic application review should be used at all times for applicable projects.

V. Equipment Description

The equipment description shall be no more than 250 characters long and shall specify the following:

A. The quantity and the size of the tank(s).

B. The number of dispensing nozzles and the number of fueling points.

C. The type and the certification numbers (including alpha version) of the Phase I & Phase II vapor recovery systems. Do not list the manufacturer (OPW, Emco Wheaton, etc.) of the balance Phase I or Phase II system if the generic certification is used (G-70-97-A & G-70-52-AM). Other systems should list the specific executive order on the ATC.

D. For modifications, list the equipment in the final configuration as proposed for the modification preceded by the words "Modify GDF:". This will allow for easy implementation of the ATC.

To ensure uniformity, the following example of a standard description will be used in the database:

MODIFY GDF: ONE 10,000 AND TWO 12,000 GALLON UNDERGROUND STORAGE TANKS SERVED BY TWO-POINT PHASE I VAPOR RECOVERY SYSTEM (G-70-97-XX), AND 4 FUELING POINTS WITH 12 GASOLINE DISPENSING NOZZLES SERVED BY BALANCE PHASE II VAPOR RECOVERY SYSTEM (G-70-52-XX)

VI. Modification to Existing Permits

An Authority to Construct is required prior to beginning a modification, when one of the following occurs:

A. A component is being replaced with one that is not on the list of interchangeable parts pursuant to the CARB certification number cited on the permit. The use of interchangeable parts by different manufacturers, provided it is allowed by the certification, does <u>not</u> constitute a modification.

B. Replacement of gasoline storage tanks.

C. A different vapor recovery system (not covered under the current permit's executive order) is being proposed; e.g., existing Balance Phase II System (G-70-52) replaced by Hasstech Vacuum Assist Phase II System (G-70-7).

D. Underground vapor return lines are modified (e.g., uncovered, extended, rerouted, moved).

E. The number of dispensers or nozzles is modified (increased or decreased).

F. The type (manufacturer or model) of dispenser is changed.

VII. Offsets

Offsets are required when the VOC emissions from the stationary source operation exceeds 10 tons per year. The gasoline throughput which corresponds to that level of emissions is 11.6 million gallons per year, as shown by the calculation below:

From the CARB Emission Factors for a GDF with Phase I and Phase II vapor control, the total emissions are as follows:

0.475	lb/1,000 gal	Tank filling loss (95%)
0.1	lb/1,000 gal	Breathing loss (U/G tank)
0.45	lb/1,000 gal	Vehicle fueling loss (95%)
0.7	lb/1,000 gal	Spillage
1.725	lb/1,000 gal	Total VOC losses

To operate without offsets, the maximum annual throughput is:

(10 ton/yr)(2000 lb/ton) / (1.725 lb/1,000 gallons) = **11.6 million gallons/yr**

To determine if VOC offsets will be triggered for the facility, use the following calculation procedure:

Assumptions:

1. Nozzles pump at 10 gal/min (from CARB executive orders).

2. Stations are designed to handle peak gasoline sales periods, so an estimated use factor of 50% is considered conservative.

3. If the time that a vehicle spends at a fueling station is 8 minutes, only about 2 minutes of that time is actually spent dispensing fuel (20 gallons @ 10 gal/min). Therefore, a utilization factor of 0.25 will be used for calculations.

4. Nozzle availability will vary according to dispenser configuration. A multiple product dispenser may have three nozzles for dispensing three different grades of gasoline. However, only one of the three nozzles may be used at any given time. Therefore, a more accurate way to estimate VOC emissions is to examine the number of fueling points available for each dispenser configuration. The number of fueling points will be determined as follows:

   Example

   Facility with four 6-nozzle multiple-product dispensers for a total of 24 nozzles:

   If one of three nozzles on each side of the dispenser can be used at any time, Number of fueling points = 24 / 3 = 8

VOC emissions from each fueling point (FP) are:

(1.725 lb/1000 gal)(1440 min/day)(10 gal/min)(0.25)(0.5) = **3.11 lb VOC/FP-day**

Maximum number of fueling points allowed (not triggering offsets):

FP = (10 ton VOC/yr) (yr/365 day) (2000 lb/ton) (FP-day/3.11 lb VOC) = **17.6**

Therefore, based on the above estimates, all facilities with 17 or fewer fueling points will emit under 10 tons of VOC emissions per year.

Typically, commercial gas stations are not expected to have greater than 17 fueling points. For a gas station to have 17 fueling points using common 6-nozzle multiple product dispensers (3 nozzles per side), the total number of dispensers at the facility amounts to 51 nozzles. Therefore, offsets will not apply to most commercial gas stations.

Facilities with greater than 17 fueling points will be required to accept a condition limiting the annual throughput to 11.6 million gallons, or supply offsets. The gasoline dispensing supplemental application form includes the maximum annual facility throughput data under ADDITIONAL INFORMATION. For large facilities or facilities known to have unusually high throughput, double check to make sure the proposed annual throughput is not greater than 11.6 million gallons per year.

If offsetting is required, this expedited procedure does not apply.

VIII. Public Notice

Per Rule 2201, subsection 5.1.3.4, public notice is required for a major source or Title I modification. In addition, public notice is also triggered for an IPE greater than 100 lb VOC/day. Because the VOC emissions from motor vehicle refueling facilities will be limited to no greater than 10 ton/yr, the source will not be a major source nor a Title I modification.

Maximum number of fueling points (FP) allowed (not triggering public notice):

FP = (100 lb/day) (FP-day/3.11 lb) = **32.1**

Therefore, all facilities with 32 or fewer fueling points will emit less than 100 lb VOC/day, and public notice requirement will not be triggered. For a typical commercial gasoline station with 3-nozzle/FP systems, this translates to a total of 96 nozzles. No motor vehicle refueling facilities in the District have 96 nozzles.

Another way to evaluate the public notice requirement is to estimate the maximum allowable gasoline daily throughput at any given facility.

Max. Throughput = (100 lb VOC/day) (1000 gal/1.725 lb VOC) = 57,971 gal/day

Therefore, all facilities with throughput of no greater than 57,971 gal/day will be exempt from the public notice requirement. For a typical commercial gasoline station (with three 10,000 gallon tanks), this translates to almost two tank turnovers per day for each storage tank, which is not expected to happen.

Commercial gas service stations have fewer than 32 fueling points and the maximum throughput is expected to be much lower than 57,971 gal/day. Therefore, public notice will not be triggered for motor vehicle refueling projects.

IV. Generic NSR Emission Calculations

The standardized application review will only reference the New Source Review (NSR) emission calculations included in Attachment V.

The NSR calculations will be based on the emission factor of 3.11 lb VOC/FP-day.

X. Health Risk Assessment

Motor vehicle refueling facilities equipped with both Phase I and Phase II vapor recovery systems satisfy the District's BACT requirement for air toxic control, and the District has determined the health risk impact from such sources are insignificant. Therefore, a health risk assessment will not be required.

XI. Emission Profile

To update the emission profile in District's Permit database, assess the quarterly emissions by dividing the annual VOC emission increase (from the application review) by four to enter into the delta PE field. The DEL should reflect the post-project potential to emit.

See Attachment V for a summary of the number of fueling points and the corresponding daily emission limitations (DEL). Enter in the VOC Emission Profile: the DEL - based on the number of fueling points, and the Delta PE - based on increase in the number of fueling points.

For sources with greater than 17 fueling points, enter in the VOC Emission Profile:

Delta PE lb/qtr = 5,000
DEL lb/day = 54.8
OFFSET EXEMPT? = No

XII. Authority to Construct Conditions

To ensure uniformity, a standard set of conditions will be used as a base for all applications (see Attachment III). Additional requirements may be required on a site specific basis due to New Source Review requirements or health risk assessment.

XIII. Updates

This GEAR will be updated as necessary to accommodate any changes in prohibitory rules, changes in BACT Clearinghouse, changes in CARB Phase I and Phase II equipment certifications, or cost information for the top-down analysis.

It should be noted that the source test requirements are frequently modified when the Executive Orders for specific Phase I and Phase II configurations are updated and amended. Therefore, Attachment III (ATC standard conditions) will be updated periodically so the modified source testing requirements will be reflected in the standard conditions in a timely manner.

The attached bibliography lists items which are referenced in this GEAR. Changes to the listed items may necessitate revisions to this document. Additionally, alterations to this policy may trigger changes to some of the listed items.

The Permitting Handbook will also be updated whenever this GEAR document is updated.

Each update will be submitted to the GEAR coordinator for review and the coordinator will forward the updates for the Director's approval.

Application Review for
Motor Vehicle Refueling Facilities

ATC APPLICATION REVIEW
Motor Vehicle Refueling Projects

Processing Engineer:
Lead Engineer (if applicable):
Date:

Facility Name:
Mailing Address:

Contact Name:
Phone:

Project Number:
Permit Number:

I. PROPOSAL:

The applicant is applying for an Authority to Construct (ATC) permit for a motor vehicle gasoline refueling facility.

[ ] New Facility

[ ] Modified Facility; Existing Permit # _____

II. APPLICABLE RULES:

Rule 2201	New and Modified Stationary Source Review Rule (Amended 6/15/95)
Rule 4102	Nuisance (Amended 12/17/92)
Rule 4621	Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants (Amended 5/20/93)
Rule 4622	Transfer of Gasoline into Vehicle Fuel Tanks (Amended 2/17/94)

III. PROJECT LOCATION:

Project Location:_____
The applicant states that the facility is not located within 1000 feet of the outer boundary of any K-12 school.

IV. PROCESS DESCRIPTION:

Gasoline is delivered to the storage tank(s) via a delivery vessel. Gasoline is then dispensed from the tank(s) into motor vehicle tanks during vehicle refueling.

V. EQUIPMENT LISTING:

_____ gallon underground/aboveground storage tank(s) served by _____ ___ Phase I Vapor Recovery System (G-70-___), and _____ fueling points with _____ gasoline dispensing nozzle(s) served by _____ Phase II Vapor Recovery System (G-70-___)

VI. EMISSION CONTROL TECHNOLOGY EVALUATION:

A. Control Technique

The motor vehicle refueling operation will use California Air Resources Board (CARB) certified Phase I and Phase II vapor recovery systems designed to reduce VOC emission by at least 95% during storage tank filling & motor vehicle refueling.

B. BACT

The use of CARB certified Phase I & II vapor recovery systems satisfies SJVUAPCD BACT requirements for motor vehicle refueling facilities.

VII. CALCULATIONS:

See Attachment V of District policy GEAR-1 for generic NSR calculations.

NSR Emissions Calculations Summary

	# of FP	PE, DEL-lb/day	IPE - lb/day	Delta PE - lb/yr
VOC Emissions	XXX	XXX	XXX	XXX

VIII. COMPLIANCE:

Rule 2201

The proposed CARB certified Phase I and Phase II vapor recovery systems satisfies BACT. This facility's emissions are below offset and public notice trigger thresholds. The number of fueling points in the equipment description limits the daily emission rate from this facility. Compliance with this rule is expected.

Rules 4102, 4621 & 4622

The proposed Phase I and Phase II vapor recovery systems satisfy the requirements of these rules.

IX. RECOMMENDATION: Issue Authority to Construct (see attached draft ATC).

X. BILLING INFORMATION:

Number of Nozzles	Fee Schedule 11 of Rule 3020
XX	$ 28 per nozzle

ATTACHMENT I

Supplemental Application Form

San Joaquin Valley Unified Air Pollution Control District
Supplemental Application Form

GASOLINE DISPENSING

This form must be accompanied by a completed Application for Authority to Construct and Permit to Operate form.

PERMIT TO BE ISSUED TO:
LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:

Type of operation: **[ ] Motor Vehicle Refueling** **[ ] Other: _____**

CARB EXECUTIVE ORDER CERTIFICATION

	Type	Executive Order No.
Phase I		**G-**
Phase II		**G-**

PHASE I VAPOR RECOVERY EQUIPMENT DESCRIPTION

Component	Manufacturer	Model Number
Fill Adapter		
Liquid Fill Cap		
Vapor Fill Cap		
Vapor Adapter		
Drop-Tube		
Extractor Assembly		
Float Vent Valve		
Pressure/Vacuum Relief Valve		
Overfill Protection		
(List Any Additional Components Required)		

Please Continue on Reverse Side

PHASE II VAPOR RECOVERY EQUIPMENT DESCRIPTION

Component	Manufacturer	Model Number
Nozzle		
Swivel		
Flow Limiter		
Vapor Check Valve		
Coaxial Hose		
Extractor Assembly		
Breakaway Fitting		
Dispenser		
(List Any Additional Components Required)		

Total Number of Gasoline Dispensing Nozzles ***(Do Not Include Diesel)***	
Total Number of Gasoline Dispensers*	

*Attach a dispenser configuration diagram if more than one dispenser configuration is used.

STORAGE TANKS DESCRIPTION

Tank Number	Type	Storage Capacity (gallons)	Type of Fuel
	[ ] Underground [ ] Aboveground		
	[ ] Underground [ ] Aboveground		
	[ ] Underground [ ] Aboveground		
	[ ] Underground [ ] Aboveground		

ADDITIONAL INFORMATION

1. Attach a copy of the site plan.

2. Complete a separate form for each tank and dispensing system if they have a different type of Phase I and Phase II vapor recovery system.

3. Maximum gasoline throughput in any one month (gallons):_____

Maximum gasoline throughput per calendar year (gallons):_____

ATTACHMENT II

BACT Analysis

(Updated on 10/1/97)

BACT Applicability:

Per District Rule 2201, subsections 4.1.1 and 4.1.1.1, an applicant shall apply BACT to a new or modified emissions unit if the unit results in an increase in permitted emissions (IPE) greater than 2 pounds of Volatile Organic Compounds (VOC) per day. The applicant is proposing to install a new or modified emissions unit with an IPE greater than 2 lb VOC/day; therefore BACT is triggered for VOC.

BACT Guidance:

Per District Policy BACT 1-6, Section IX, "A top-down BACT analysis shall be performed as a part of the Application Review for each application subject to the BACT requirements pursuant to the District's NSR Rule... for source categories or classes covered in the BACT clearinghouse, relevant information may be simply cited from the Clearinghouse without further analysis."

Current SJVUAPCD BACT Clearinghouse guidelines 4-3 & 4-4 cover motor vehicle gasoline storage and dispensing operation. Therefore, relevant information will be cited without further analysis.

Top-down BACT analysis:

A. Step 1 - Identify All Technologically Feasible Controls

Combined emission control system consisting of CARB certified Phase I and Phase II vapor recovery system.

B. Step 2 - Eliminate Technologically Infeasible Options

All control technologies listed in the clearinghouse are feasible.

C. Step 3 - Rank Remaining Control Technologies by Control Effectiveness

CARB certified Phase I and Phase II vapor recovery systems.

D. Step 4 - Cost Effectiveness Analysis

A cost effectiveness analysis is not required when the applicant proposes the most effective control method identified as technologically feasible. A combined Phase I and Phase II vapor recovery system is identified as technologically feasible and achieved in practice BACT. Therefore, further cost effectiveness analysis is not required.

E. Step 5 - Select BACT

The applicant's proposed use of Phase I and Phase II vapor recovery for the control of VOC emissions satisfies District's BACT requirements.

ATTACHMENT III

Authority to Construct
Standard Conditions

STANDARD PERMIT CONDITIONS

Because new systems are continuously being developed, always check the latest executive order for any testing requirements not listed here that should be included on the Permit.

Underground Tanks:
The following is a list of conditions that may be used for underground dispensing operations depending on the requirements in the executive order.

A. {239} The permittee shall perform and pass a Dynamic Back Pressure Test using BAAQMD Method ST-27 within 60 days after initial start-up and at least once every five years thereafter. [District Rule 4621]

B. {241} The permittee shall perform and pass a Static Pressure Decay Test using BAAQMD Method ST-30 within 60 days after initial start-up and at least once every five years thereafter. [District Rule 4621]

C. {261} The District shall be notified by the permittee 15 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. [District Rule 1081]

D. {262} The vapor recovery system and its components shall be installed, operated, and maintained in accordance with the State certification requirements. [District Rules 4621 & 4622]

E. {Special} The permittee shall perform the Red Jacket Calibration Procedure within 60 days after initial start-up and once every 12 months thereafter. [District Rule 4622]

F. {modified 361} The permittee shall perform and pass a Vapor Return Leak Tightness Test Procedure from Executive Order G-70-70 within 60 days after initial start-up and once every 12 months thereafter. [District Rule 4622]

G. {modified 322} The permittee shall perform, and successfully pass, a Static Pressure Decay Test using BAAQMD Method ST-30 within 60 days after initial start-up and at least once every 12 months thereafter. [District Rule 4622]

H. {323} The permittee shall perform and pass an Air-to-Liquid Ratio Test using CARB procedure TP-201.5 within 60 days after initial start-up and at least once every five years thereafter. [District Rule 4622]

I. {modified 323} The permittee shall perform and pass an Air-to-Liquid Ratio Test using CARB procedure TP-201.5 within 60 days after initial start-up and at least once every 12 months thereafter. [District Rule 4622]

STANDARD PERMIT CONDITIONS (continued)

Aboveground Tanks:
The following is a list of conditions that may be used for aboveground dispensing operations depending on the requirements in the executive order.

J. {196} Aboveground storage tank(s) shall be equipped with pressure/vacuum valves set to within 10 percent of the maximum working pressure of the tank. [District Rule 4622]

K. {modified 242} The permittee shall perform and pass a Leak Test using BAAQMD Method ST-38 within 60 days after initial start-up and once every 5 years thereafter. [District Rule 4622]

L. {242} The permittee shall perform and pass a Leak Test using BAAQMD Method ST-38 within 60 days after initial start-up and once every 12 months thereafter. [District Rule 4622]

M. {360} The permittee shall perform the Minimum Maintenance Requirements for the Hirt VCS-200 from Executive Order G-70-139, and shall record all maintenance activities in a maintenance log. [District Rule 4622]

N. {Special} The permittee shall perform and pass a "Vapor Return Line Vacuum Integrity Test" per Exhibit 4 of Executive Order G-70-165 within 60 days after initial startup and at least once every 5 years thereafter. [District Rule 4622]

Underground Balance systems (G-70-52 + all other balance systems)
Use conditions A, B, C, and D.

Non-bootless Hirt Underground System (G-70-33)
Use conditions A, B, C, and D.

Non-bootless Hasstech VCP-2A Underground System (G-70-7)
Use conditions A, G, C, and D.

Red Jacket Systems (G-70-14)
Use conditions A, B, E, C, and D.

Healy Systems (G-70-70)
use conditions B, F, C, and D
NOTE: This executive order was revoked; new / modified systems are not allowed.

EZ-flo nozzles for balance system (G-70-170)
Use conditions A, G, C, and D.

STANDARD PERMIT CONDITIONS (continued)

Underground Bootless Nozzles (G-70-118, 150, 154, 159, 163, 169)
Use conditions A, G, H, C, and D

Healy underground Vacuum Assist w/ Model 600 Nozzle (G-70-165)
Use conditions A, G, H, N, C, and D

Hasstech underground Vacuum Assist w/ Bootless Nozzles (G-70-7)
Use conditions G, H, C, and D

Hasstech aboveground Vacuum Assist w/ Bootless Nozzles (G-70-175)
Use conditions J, L, H, C, and D

Vacuum Assist w/ Bootless Nozzles (G-70-153-AC, 164-AA, 177)
Use conditions A, I, C, and D

Aboveground Tanks w/ Balance System (G-70-102, 128-B, 129, 131-A, 136, 137, 143, 152)
Use conditions A (only if remote dispenser), J, K, C, and D

Aboveground Tanks w/ Balance System (G-70-116-F, 130-A, 132-B, 133-A, 148-A, 149, 155, 156, 157, 158-A, 160, 161, 162, 167)
Use conditions J, L, C, and D

Systems with Remote Dispensing Configurations
Remote dispensing configurations are defined as having the coaxial splitter manifold located below the top of the gasoline storage tank. These systems must perform a Dynamic Back Pressure Test (ST-27), so add condition A.
NOTE: Balance systems are not allowed to have remote dispensing configurations.

Hirt aboveground Systems (G-70-139)
Use Conditions J, K, M, C, and D

Healy aboveground Systems With Central Vacuum Unit (G-70-140)
Use Conditions J, K, F, C, and D (do not use A even for remote dispensers)
NOTE: This executive order was revoked; new / modified systems are not allowed.

Hasstech aboveground non-bootless Systems (G-70-7)
use conditions J, L, C, and D

Aboveground, Non-Vaulted Steel Tanks Using Hirt or Hasstech Systems
The test for these systems must be performed when the ambient temperature is not rising and there is no strong solar radiation (i.e. the early morning hours). These tests may actually show pressure growth in an aboveground tank if performed during the heat of the day. In order to reduce the effects of pressure growth, it should be specified on the permit for the test to be performed before 10:00 A.M.

Systems with greater than 17 fueling points:

Add the following condition:

X. {362} The facility gasoline throughput shall not exceed 11.6 million gallons per year, and records of monthly throughput shall be kept on site for a period of two years, and shall be made available to District staff upon request. [District Rule 2201]

ATTACHMENT IV

Over-the-Counter Processing Checklist

MOTOR VEHICLE REFUELING PROJECT CHECKLIST

(for Over-the-Counter processing)

ATC # _____ Project # _____

Engineer _____

PHASE I Vapor Control System: CARB Executive Order # _____

PHASE II Vapor Control System: CARB Executive Order # _____

Check all the following for over-the-counter processing:

_____ The operation is the only source of VOC emissions at the facility.

_____ The number of fueling points is less than 17, or a 11.6 million gal/yr limit is imposed.

_____ CARB certified components are proposed for Phase I & II vapor recovery systems.

_____ Facility is not located within 1000 feet of the outer boundary of any K-12 school.

ATTACHMENT V

Generic NSR Emission Calculations

This type of operation will emit only VOC.

A. Emission Factors (EF):

Per District Policy GEAR-1, VOC emissions from each fueling point (FP) are 3.11 lb VOC/FP-day.

B. Assumptions:

Facility is allowed to operate up to 365 days per year.

C. Emission Calculations:

1. Potential to Emit (PE)

Number of fueling points $\leq$ 17

Therefore, PE (VOC) $\leq$ 52.9 lb/day
(see Table V.1 for # of FP and corresponding PE)

2. BACT:

The proposed CARB certified Phase I and Phase II vapor recovery systems satisfy the District's BACT requirements for motor vehicle refueling. Therefore, further calculations are not required.

3. Increase in Permitted Emissions (IPE):

IPE (VOC) = PE = (3.11 lb/day) x (increase in # of FP) $\leq$ 52.9 lb/day
(see Table V.1 for # of FP and corresponding PE)

4. New Source Review (NSR) balance:

For this emissions unit, there are no PM10, SOx, and CO emissions. Therefore, NSR balance calculations are not required.

5. Stationary Source Potential to Emit (SSPE):

SSPE (VOC) = (3.11 lb/day) x (# of FP) x (365 day/yr) $\leq$ 20000 lb/day

Because the SSPE for VOC is not greater than 10 ton/yr (or 20,000 lb/yr), offsets are not required per Rule 2201, subsection 4.2.3.

6. Actual Emission Reductions (AER):

None.

7. Public Notice:

Public notice is not triggered for this project. This facility is not a new major source nor a Title I modification as defined in Rule 2201, subsections 3.19 & 3.31. Furthermore, the IPE for VOC emissions is below the public notice trigger of 100 lb/day specified in Rule 2201, subsection 5.1.3.4.2.

8. Daily Emission Limitations (DELs):

DEL for the motor vehicle refueling operation is established by the number of fueling points (based on the permitted facility configuration) and the emission factor of 3.11 lb VOC/FP-day.

Table V.1: VOC Emission Summary

# of FP (for DEL) Increase in # of FP (for Delta PE)	DEL - lb VOC/day	Delta PE - lb VOC/qtr
1	3.1	284
2	6.2	568
3	9.3	851
4	12.4	1135
5	15.6	1419
6	18.7	1703
7	21.8	1987
8	24.9	2270
9	28.0	2554
10	31.1	2838
11	34.2	3122
12	37.3	3405
13	40.4	3689
14	43.6	3973
15	46.7	4257
16	49.8	4541
17	52.9	4824
18 or greater	54.8	5000

BIBLIOGRAPHY

Rules and Regulations		
Rule Number	Title	Last Updated
District Rule 2010	Permits Required	12/17/1992
District Rule 2201	New and Modified Stationary Source Review Rule	6/15/1995
District Rule 4102	Nuisance	12/17/1992
District Rule 4621	Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants	5/20/1993
District Rule 4622	Transfer of Gasoline into Vehicle Fuel Tanks	2/17/1994

Best Available Control Technology (BACT) Guidelines		
Guideline Number	Title	Last Updated
4-3	Motor Vehicle Gasoline Storage/Dispensing Operation	7/1/1993
4-4	Motor Vehicle Gasoline Storage/Dispensing Operation	7/1/1993

District Policies		
Policy Number	Title	Last Updated
SSPP/GEAR 13	Emission Profile for Gasoline Dispensing Facilities	9/15/1994
BACT 1	Best Available Control Technology (BACT) Policy	4/18/1995

Electronic Documents		
Document Name	Title	Last Updated
G:/per/gear/gdf.doc	Standard Application Review for Motor Vehicle Refueling Facilities	11/13/1997

Reference Materials		
Document Name	Title	Last Updated
CARB Publication	Gasoline Marketing Emission Factors (established by CARB certification testing)	1993

Miscellaneous		
Item	Title	Last Updated
Supplemental Form	Supplemental Application Form for Gasoline Dispensing	11/13/97
General Conditions	General Condition #s 196, 239, 241, 242, 261, 262, 322, 323, 360, 361, 362	11/13/97
Checklist	Over-the-Counter Processing Checklist	11/13/97
NSR Calculations	Generic New Source Review Calculations	11/13/97