



## Instructions: Gas Dispensing Facility Form

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**Introduction** Use the following instructions to help guide you through the *Gas Dispensing Facility (GDF) form*. Use the “Tables for Gasoline Dispensing Facility Form” at the end of these instructions for a list of valid entries for this form. A *Permit Application Cover form* is required with this form. In most cases, a *GDF Equipment Worksheet* will also be required.

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**Who should use this form?** This form should be submitted for all requested physical changes proposed for your GDF. Some common physical changes include but are not limited to:

- Adding a storage tank
- Changing materials in a storage tank
- Changing Phase I and or Phase II vapor recovery systems

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**What activities at GDFs do not require this form?** The following activities at GDFs do not require a permit application:

- GDFs typically do not have abatement devices.
- GDFs typically do not require CEQA or PSD analysis.
- GDFs have volume emission points with emission generated from the outside.
- The upstream device for the emission point is typically the GDF.

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**Facility Information** **BAAQMD Facility ID** - If you are an existing facility, fill out this field so that BAAQMD can associate your changes to your facility. The facility ID is available on your permit or invoice issued by BAAQMD.

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**General Information** **BAAQMD Device IDs** – For GDFs, the device ID is a new identifier and will be listed on your Permit to Operate if it was issued after March 5, 2012. Skip if this is not available.

**Device/Operation Name** – This is the name you associate to this GDF.

**Initial/proposed date of operation** – For new construction, enter the date that you propose will be the initial date of operation. For a modification of an existing permitted GDF, enter the date that you propose the changes to occur. For an existing GDF that is not currently permitted by BAAQMD, enter the date for which the GDF initially operated.

**Device or Operation Description** – This is your description of the device or operation. This field can be used to distinguish it with other similar devices (e.g. ID numbers, location), make, model and other similar information.

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**Operation Activities** **Refueling Motor Vehicles (retail)** – GDFs that are used by the general public.  
**Refueling Motor Vehicles (non-retail)** – GDFs that are not used by the general public. Typical examples of this type are GDFs located at companies and car rental businesses.  
**Refueling Agricultural Vehicles** – GDF used exclusively to fuel agricultural vehicles.  
**Refueling Aircraft (directly)** – Fueling aircraft directly from the GDF, not fueling aircraft by truck.  
**Refueling Marine Vessels** – Fueling of boats and other marine vehicles.



**Tank and Vapor Recovery Information**

For each tank or tank compartment enter the Material Stored. Refer to the list below. There are two types of materials, regulated and non-regulated. This will be important for other sections of the form.

Regulated Materials	Non-Regulated Materials
Gasoline	Diesel
Ethanol	Biodiesel
Methanol	Jet fuel
Aviation (AV) gas	Kerosene

➤ If other, enter name of material

Phase I and Phase II Vapor Recovery Types – See “Tables for the Gasoline Dispensing Facility Form” at the end of these instructions for a current list of valid entries. If you are claiming an exemption from Phase II requirements per BAAQMD Regulation 8, Rule 7, Section 112.9, you must also submit a **Fleet ORVR Exemption form**.

**Product Dispensing Nozzles**

This section is a count of all nozzle types at your GDF.

For gasoline, the type of product nozzle depends on the number of gasoline products that can be dispensed through that nozzle. The most common types of nozzles are single product and triple product nozzles. A gasoline dispenser will typically have 3 single product nozzles (one nozzle for each grade of gasoline) or 1 triple product nozzle (a nozzle that can dispense 3 grades of gasoline).

**Facility Plot Plan**

See detailed facility plot plan example at the end of these instructions.

**Liquid Condensate Trap**

**Liquid Condensate Trap** - A device designed to collect liquid that condenses in vapor return lines to prevent liquid blockage. See “Tables for the Gasoline Dispensing Facility Form” at the end of these instructions for a current list of valid entries.

**Operating Schedule**

A continuous operation is a GDF that is available for use 24 hours per day.

**Material Usage**

For each regulated material (see table above for list), enter the maximum throughput that will be dispensed. The amounts will be your throughput limits that will be on your permit. If this is unknown, enter “TBD” (for to be determined). Typically, the throughput will be limited by the Health Risk Screening Analysis and other factors.

**Still need help?**

Call the Engineering Division at (415) 749-4990.



# Tables for the Gasoline Dispensing Facility Form

Use these tables for a list of valid entries for the **GDF form**.

## Material List for Gasoline Dispensing Facility Form

Regulated Materials	Non-Regulated Materials
Gasoline	Diesel
Ethanol	Biodiesel
Methanol	Jet fuel
Aviation (AV) gas	Kerosene

## Liquid Condensate Trap Types

Liquid Condensate Trap Types
EVR-certified
Simple Trap
Level Indicator
Auto-Educted
Multiple traps

## Phase I Vapor Recovery entries for Gasoline Dispensing Facility Form

Entry for Part 4 – Phase I Vapor Recovery Type	Description	CARB Executive Order
CNI Manufacturing	CNI Manufacturing	VR-104
Coaxial	Coaxial	N/A
EBW (VR-103)	EBW manufactured	VR-103
EMCO Wheaton Retail (VR-105)	EMCO Wheaton Retail	VR-105
OPW (VR-102)	OPW manufactured	VR-102
OPW EVR with SLC (VR-401)	OPW manufactured enhanced vapor recovery with standing loss control	VR-401
Phil-Tite (VR-101)	Phil-Tite manufactured	VR-101
Two Point	A two-point system - This not an enhanced vapor recovery system.	N/A
None – Exempt Material	Tank holds a non-regulated material	N/A
None – BAAQMD Regulation 8-7-111.1	Capacity of storage tank holding regulated material is less than 250 gallons.	N/A
None – BAAQMD Regulation 8-7-111.3	Storage tank with a capacity of less than 550 gallons that are filled with a submerged-fill pipe and used primarily for agricultural vehicles.	N/A
None – BAAQMD Regulation 8-7-111.4	Storage tanks installed before January 1, 1999 where Phase I vapor recovery is not feasible. <b>Submit</b> justification for consideration in writing.	N/A



## Phase II Vapor Recovery entries for Gasoline Dispensing Facility Form

Entry for Part 4 – Phase II Vapor Recovery Type	Description	CARB Executive Order
Balance	Balance System - This not an enhanced vapor recovery system.	N/A
EMCO WHEATON EVR with HIRT VCS Processor and Incon ISD	EMCO WHEATON EVR Phase II with HIRT VCS 100 Processor and Incon ISD	VR-208
EMCO WHEATON/VST EVR with HIRT VCS Thermal Oxidizer	EMCO WHEATON/VST EVR Phase II with HIRT VCS 100 Thermal Oxidizer	VR-203
EMCO WHEATON/VST EVR with HIRT VCS and Veeder Root ISD	EMCO WHEATON/VST EVR Phase II with HIRT VCS 100 Thermal Oxidizer and Veeder Root ISD	VR-204
EMCO WHEATON/VST EVR with Veeder Root Vapor Polisher	EMCO WHEATON/VST EVR Phase II with Veeder Root Vapor Polisher	VR-203
EMCO WHEATON/VST EVR with Veeder-Root Vapor Polisher and ISD	EMCO WHEATON/VST EVR Phase II with Veeder Root Vapor Polisher and Veeder-Root ISD	VR-204
Hasstech VCP-3A	Hasstech VCP-3A	N/A
Healy 400 ORVR	Healy 400 Onboard Refueling Vapor Recovery (ORVR)	N/A
Healy EVR Phase II	Healy EVR Phase II	VR-201
Healy EVR Phase II with Incon ISD	Healy EVR Phase II with Incon ISD	VR-202
Healy EVR with Veeder-Root ISD	Healy EVR Phase II with Veeder-Root ISD	VR-202
Hirt VCS 400	Hirt VCS 400	N/A
VST EVR with ECS Membrane Processor	VST EVR Phase II with ECS Membrane Processor	VR-203
VST EVR with ECS Membrane Processor and Veeder-Root ISD	VST EVR Phase II with ECS Membrane Processor and Veeder-Root ISD	VR-204
VST EVR with FFS Clean Air Separator	VST EVR Phase II with FFS Clean Air Separator	VR-203
VST EVR with FFS Clean Air Separator and Veeder-Root ISD	VST EVR Phase II with FFS Clean Air Separator and Veeder-Root ISD	VR-204
None – Exempt Material	Tank holds a non-regulated material	N/A
None – BAAQMD Regulation 8-7-112.1	GDF is exempt from Phase I requirements.	N/A
None – BAAQMD Regulation 8-7-112.3	Dispensing of gasoline where Phase I vapor recovery is not feasible. <b>Submit</b> justification for consideration in writing.	N/A
None – BAAQMD Regulation 8-7-112.4	Mobile refueling and any other vehicle to vehicle refueling.	N/A
None – BAAQMD Regulation 8-7-112.5	Tanks installed prior to March 4, 1987 at facilities which exclusively refuel motor vehicle tanks with a capacity of 0.019 cubic meters (5 gallons) or less.	N/A
None – BAAQMD Regulation 8-7-112.6	Facilities which exclusively refuel aircraft or marine vessels.	N/A
None – BAAQMD Regulation 8-7-112.7 Low throughput	Tanks installed prior to March 4, 1987 at facilities with an annual throughput of less than 227 cubic meters (60,000 gallons) where Phase II vapor recovery equipment was not installed prior to July 1, 1983. Should throughput exceed 227 cubic meters (60,000 gallons) in any consecutive 12-month period, this exemption shall no longer apply.	N/A



**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**  
BAAQMD  
Engineering Division  
939 Ellis Street,  
San Francisco, CA 94109

<b>Entry for Part 4 – Phase II Vapor Recovery Type</b>	<b>Description</b>	<b>CARB Executive Order</b>
None – BAAQMD Regulation 8-7-112.9	Facilities which can demonstrate to the APCO that at least 90% of the vehicles refueled at the facility in any (time period) are owned by a common operator and equipped with onboard refueling vapor recovery (ORVR). This exemption shall not apply to facilities required to have Phase II vapor recovery under state law.	N/A

## GDF Plot Plan Checklist:

Facility Site Plans or Plot Plans should include in one or multiple attachments:

1. Description of the scope of work
- 2.\* Locations of the following on the property either drawn to scale with the scale presented or with dimensions noted to place accurately on the property:
  - a. Property lines
  - b. All storage tanks (underground or aboveground) for products dispensed
  - c. All Dispensers
  - d. All piping
  - e. Vent Riser(s)
  - f. Dispenser island covering or canopy if applicable
  - g. Any buildings on the site
  - h. Any processors (e.g. Franklin-Healy Clean Air Separator)

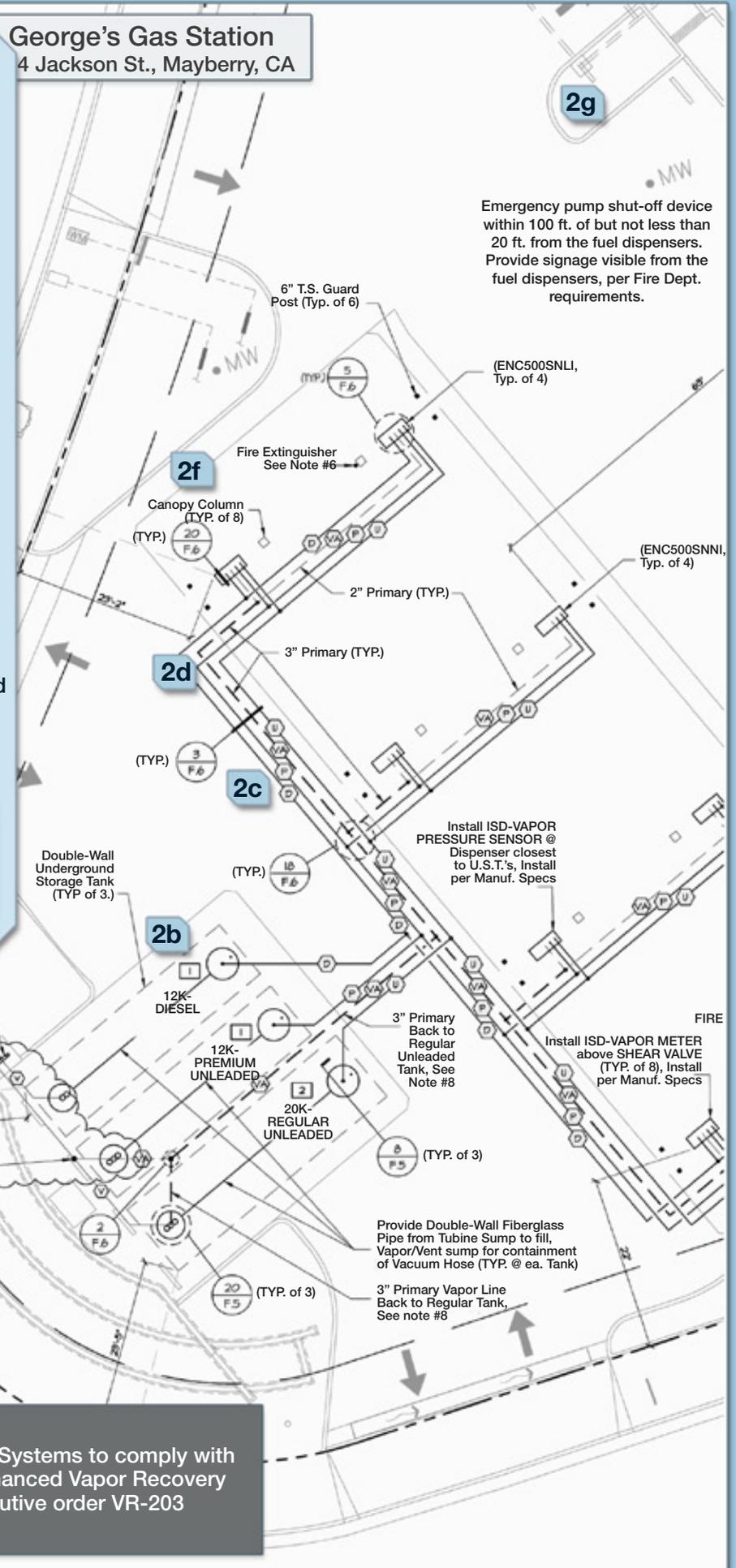
3.\* Installation notes, Tank and Piping notes or details (including tank size and product, vapor recovery details, piping diameters and slopes for existing or proposed installation)

4. Equipment list, schedule or bill of materials

\* If plans are not available (no work will be done on the piping or tanks or the physical layout of the site) then you may submit the following:

1. Description of the scope of work
4. Equipment list

**George's Gas Station**  
4 Jackson St., Mayberry, CA



Emergency pump shut-off device within 100 ft. of but not less than 20 ft. from the fuel dispensers. Provide signage visible from the fuel dispensers, per Fire Dept. requirements.

PROPERTY LINE (TYP.)

Vent Risers w/ Carbon Canister, See Dtl. 16 on Sht. F.6

Manifold Vent Line Below Ground, Back to Regular Unleaded Tank, See Dtl. 6 Sht. F.6 (Sim.)

PROPERTY LINE (TYP.)

**1**

**Scope of Work:**  
Upgrade existing Phase II Vapor Recovery Systems to comply with California Air Resources Board (CARB) Enhanced Vapor Recovery Requirements as set forth by a CARB Executive order VR-203 (EVR without in-station diagnostics).

## George's Gas Station 1234 Jackson St., Mayberry, CA

### Installation Notes:

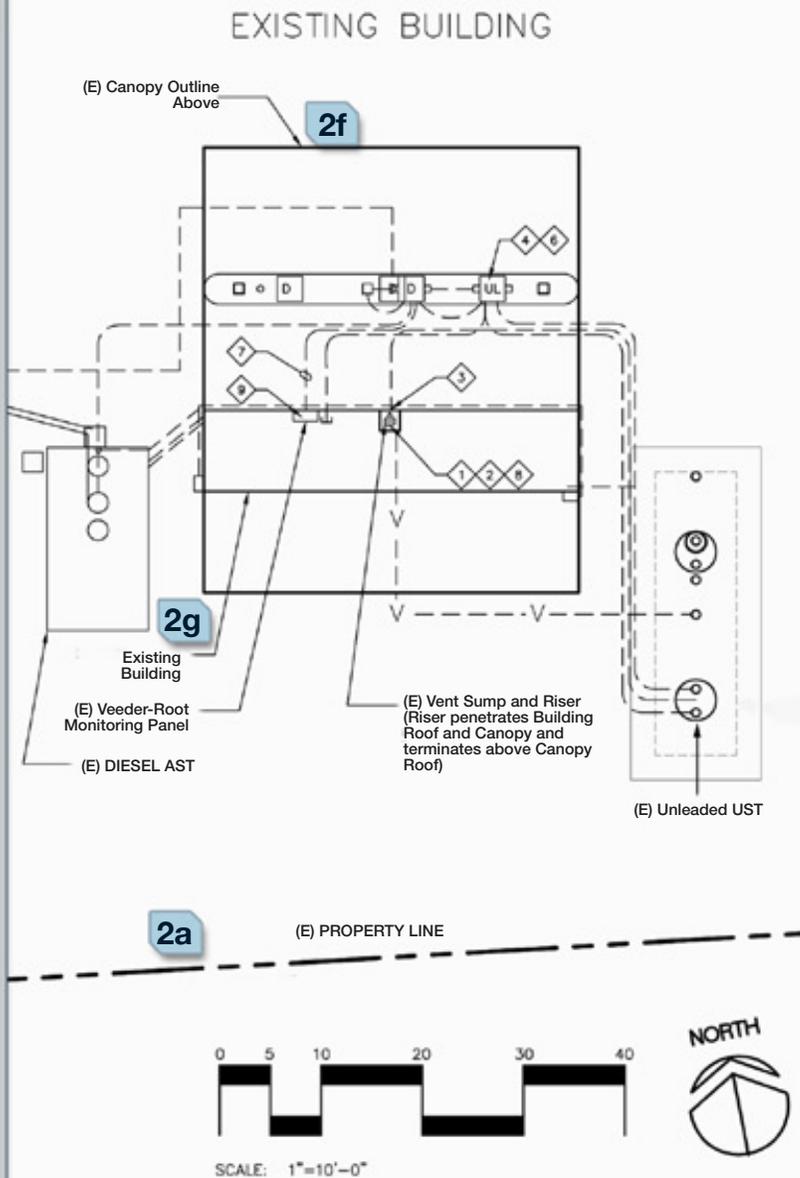
3

- 1 REPLACE (E) ABOVEGROUND VENT RISER WITH SINGLE CONTINUOUS PIPE RUN OF 2" DIA. SCH. 40 BLACK STEEL (NO COUPLERS). PAINT PIPE FOR CORROSION PROTECTION. DO NOT PAINT VENT CAP OR CARBON CANISTER. SEAL ALL ROF PENETRATIONS WATER TIGHT.
- 2 INSTALL NEW VEEDER-ROOT CARBOM CANISTER (FILTER) MIN. 18# ABOVE EXISTING METAL CANOPY ROOF. MANIFOLD TO EXISTING UNDERGROUND TANK VENT RISER ASSEMBLY ABOVE. SEE DETAIL C3, SHEET EVR2.
- 3 INSTALL NEW STRUCTURAL SUPPORTS AND ATTACH TO NEW VENT RISER. SEE DETAIL C3, SHEET EVR2 AND STRUCTURAL DETAILS; SHEET EVR 3.
- 4 REMOVE EXISTING HANGING HARDWARE AT EXISTING UNLEADED DISPENSERS AND INSTALL NEW EVR COMPLIANT EQUIPMENT. SEE DETAIL A4, SHEET EVR2. (TYP. EACH DISPENSER)
- 5 NOT USED.
- 6 INSTALL NEW PRESSURE SENSOR WITHIN EXISTING DISPENSER CABINET. LOCATE IN DISPENSER CLOSEST TO UG TANKS. SEE DETAIL A2, SHEET EVR2.
- 7 NO NEW UNDERGROUND ELECTRICAL WORK. RE-USE (E) CONDUIT FOR LOW VOLTAGE CONDUCTORS FROM NEW EVR EQUIPMENT AT VENT SUMP TO (E) MON. PANEL AS REQUIRED. (EXISTING CONDUIT TO BE REMOVED/REPLACED ONLY IF CONDUIT IS DAMAGED.) INSTALL NEW CONDUCTORS PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
- 8 ROUTE NEW CONDUIT OVERHEAD TO CARBON CANISTER. SEE DETAIL A5; SHEET 3. TERMINATE CONDUIT PER MANUFACTURER'S REQUIREMENTS. SEAL ALL BUILDING PENETRATIONS WATER TIGHT.
- 9 UPGRADE AND REPROGRAM EXISTING VEEDER-ROOT ELECTRONIC TANK MONITORING PANEL TO ACCOMODATE NEW EVR EQUIPMENT.

**NOTE:**

ALL EQUIPMENT TO BE INSTALLED PER C.A.R.B. EXECUTIVE ORDER VR-203-D. AND RELATED INSTALLATION AND OPERATION MANUAL.

(<http://www.arb.ca.gov/vapor/eos/eo-vr204/eo-vr204.htm>)



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### Bill of Materials:

ITEM	QTY	DESCRIPTION	MANUFACTURER PART NO.	FURNISHED BY
1	1	CARBON CANISTER FOR 2" VENT	VEEDER-ROOT 861290-002	CONTRACTOR
2	1	INLET PIPING KIT	VEEDER-ROOT 330020-638	CONTRACTOR
3	1	CARBON CANISTER MOUNTING BRACKET - 2"	VEEDER-ROOT 332861-002	CONTRACTOR
4	1	P/V VENT	HUSKY MODEL # 5885	CONTRACTOR
5	2	BREAK-AWAY (GASOLINE)	VST MODEL VSTA -EVR-SBK	CONTRACTOR
6	3	NOZZLE (GASOLINE)	VST MODEL VSTA -EVR-NB	CONTRACTOR
7	2	COAXIAL CURB HOSE - 8'	VST MODEL VDV -EVR-SERIES	CONTRACTOR
8	2	COAXIAL WHIP HOSE - 12'	VST MODEL VSTA -EVR-SERIES	CONTRACTOR
9	1	PRESSURE SENSOR INSTALLATION KIT	VEEDER-ROOT 330020-433	CONTRACTOR

George's Gas Station  
1234 Jackson St., Mayberry, CA

## **WORKPLAN**

### **CARBON CANISTER WITH ISD:**

- Apply for B.A.A.Q.M.D. ,Environmental Health, and Fire permits
- The Veeder Root Carbon Canister (VRCC) will be installed according to all local agency requirements (VRCC has been approved as a filter. No set back requirements unless otherwise noted)
- Hanging Hardware will be replaced with VST-EVR-NB nozzles and VST hoses
- The Station will be equipped with a Veeder Root TLS-350 console with Veeder Root ISD
- A Veeder Root 329356-004 Smart Sensor Interface Module and a Veeder Root 3322050-001 atmospheric sensor will be installed in the TLS console
- A Veeder Root 332374 Vapor Flow meter will be installed in each dispenser
- A Veeder Root 331946-001 Pressure Sensor will be installed in the dispenser closest to the underground storage tanks.
- Vapor return and vent piping is a minimum of 2" in diameter and is equipped with a vent manifold connecting the headspaces of all gasoline storage tanks.
- The vapor return piping does not include any liquid Condensate traps
- Vent piping will be supported by an external structure adequate to support vapor polisher.
- The outlet of the Vapor Polisher will be 12' above grade