

**SAN DIEGO AIR POLLUTION CONTROL DISTRICT  
 FEE SCHEDULE 26F  
 HIRT VCS400-7 VACUUM ASSIST SYSTEM EO G-70177-AA  
 INSPECTION CHECKLIST**

Annual       Mid-Year       Test/Witness      Inspection Date: \_\_\_\_\_

Company (DBA) \_\_\_\_\_

Location: \_\_\_\_\_

Representative: \_\_\_\_\_ Title: \_\_\_\_\_

Sector/ID #: \_\_\_\_\_ Permit #: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

**EQUIPMENT DESCRIPTION**

Is equipment description same as Permit to Operate?  Yes  No

If no, are changes in compliance with applicable District rules:  Yes  No

Description of changes: \_\_\_\_\_

Permit posted in compliance with applicable District rules?  Yes  No

Were permit conditions reviewed? (Current, supported by a rule, enforceable)  Yes  No

Operating in compliance with permit conditions? (If not, list affected permit condition(s))  Yes  No

**PHASE I VAPOR RECOVERY**

**Submerged Fill Pipe (SFP) (Annual Inspection Only)**

Product _____	SFP Measurements _____	“
Product _____	SFP Measurements _____	“
Product _____	SFP Measurements _____	“
Product _____	SFP Measurements _____	“

Tank caps and gaskets in good condition?  Yes  No

Drybreak(s) operable and properly seal(s)?  Yes  No

Fuel drop observed?  Yes  No

If yes, was all Phase I equipment (hoses, hose elbow gaskets, etc) used properly and in good working order?  Yes  No

Are vent lines manifolded aboveground?  Yes  No

If so, is manifold greater than 12 feet above driveway surface?  Yes  No

Is access provided for inspecting all components?  Yes  No

Are the storage tank vent pipes, manhole covers, and spillbox covers maintained in a color to minimize solar gain or color coded for product identification?  Yes  No

**PHASE II HIRT VCS400-7 VACUUM ASSIST SYSTEM**

Nozzle(s), manufacturer(s), and model(s): \_\_\_\_\_

Are nozzles certified and installed per Attachment 1?  Yes  No

Are nozzles equipped with vapor valve and free of all defects and deficiencies per Attachment 1?  Yes  No

Hose(s), manufacturer(s)/model(s): \_\_\_\_\_

Are hoses certified and installed per Attachment 1?  Yes  No

Length of longest hose: \_\_\_\_\_ (Maximum length of any hose shall be 10 ½ feet.)

Are any hoses touching the horizontal surface of the island or the ground?  Yes  No

Do the breakaways, if installed, seal the vapor path when separated per Attachment 1?  Yes  No

Additional equipment certified and installed per Attachment 1?  Yes  No

**VCS-400-7 CONTROL PANEL**

Does the VCS400-7 system indicate proper operation of the system during inspection?  Yes  No

The control panel shall record, with the date and time, and store for 365 days, the length of time the system operates at a vacuum level of at least 4.2” water column (normal) and the length of time the system operates with a vacuum level below 4.2” water column for periods longer than 10 minutes (out of specs).

System monitor data reviewed from date of last inspection?  Yes  No

Date of last inspection or period review: \_\_\_\_\_

List any dates where the Hirt system went into alarm: \_\_\_\_\_

Is there a pressure/vacuum gauge installed in dispenser farthest from the processor which has a range of up to 10” wc vacuum 10” wc pressure? (Per Approval Letter 98-11)  Yes  No

Does the pressure/vacuum gauge installed show proper operation of the system. (If the system fails to maintain at least 4.2” wc vacuum for ten minutes, an alarm will sound) **Note: The control panel shall record, with date and time, and store for 365 days, the length of time the system operates and a vacuum level below 4.2” wc for periods longer than 10 minutes.**  Yes  No

Is dispensing occurring while the monitor lights are off or the processor is inoperable?  Yes  No

Is the horizontal distance between the pressure/vacuum valve and the processor at least 20 feet?  Yes  No

**RENEWAL TESTING**  NA

District notified 15 calendar days prior to the required annual test(s)?  Yes  No

Date(s) of notification: \_\_\_\_\_

Test conducted 45 calendar days prior to renewal date?  Yes  No

Date(s) results received: \_\_\_\_\_

Annual test:	<u>Date</u>	<u>Test</u>	<u>Pass</u>	<u>Fail</u>	<u>Incomplete</u>
1.	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**LEGEND:** 2” = Two inch Pressure Decay A/L = Air- to-Liquid TT = Torque Test BT = Bag Test  
10” = Ten inch Pressure Decay DT = Drop Tube Integrity Test PV – PV Valve Test

Test results submitted to the District within 15 calendar days of test?  Yes  No

In the event of a failed test, were repairs made and a retest performed before equipment put back in service?  Yes  No  N/A

Is a copy of all test data onsite? (If no, address in comments)  Yes  No  N/A

Compliance issues addressed regarding contractor data since last inspection:  
If no explain in comments.

Yes  No  N/A

Description of compliance issues addressed \_\_\_\_\_  
\_\_\_\_\_

Date of last inspection: \_\_\_\_\_

Record review period: \_\_\_\_\_

Are the inspection, maintenance, flowrate, and throughput records being maintained  
per A/C or P/O conditions?

Yes  No

If no, explain \_\_\_\_\_  
\_\_\_\_\_

Is there a conspicuous posting of the operating instructions and ARB toll-free complaint  
telephone number (1-800-952-5588)?

Yes  No  N/A

Comments: \_\_\_\_\_  
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\_\_\_\_\_

Inspector's Signature: \_\_\_\_\_

Date of Report: \_\_\_\_\_

## ATTACHMENT 1

### CARB CERTIFIED EQUIPMENT\* FOR USE WITH THE HIRT VCS400-7 VACUUM ASSIST SYSTEMS

#### NOZZLES

OPW 11VA-29 or any bootless nozzle which has been certified specifically for use with the VCS400-7 system. Replacement 11VA-29 nozzles, new or rebuilt, must include the stainless steel spout assembly.  
**(Note: Existing OPW 11VA-29 nozzles in the field may use either a stainless steel or an aluminum spout.)**

#### BREAKAWAY COUPLINGS (Optional)

If installed, only CARB-certified breakaways with a valve, which closes the vapor path when separated, shall be used. Such as, Catlow C200CV, C200CVS, IVC200S, Emco Wheaton A4119, OPW 66CLP-5100, Richards CX41, Husky 3360VR.

#### PROCESSOR UNIT

Model #VCS400-7. Dual rate processor with Model #K12 nozzles mixing type bootless burner. Also #K14 control panel.

#### PRESSURE/VACUUM VALVES

Hazlett H-PVB-1 Gold label, Husky 4885 with settings as specified below:

3" ± .5" pressure, 8" ± .5" vacuum

#### COAXIAL HOSES

Any CARB certified coaxial hose listed in the current revision of EO G-70-52-AM such as: **(Dayco Petroflex 7573 ½", 7574 5/8", Goodyear Maxim Plus 5/8", and Thermoid Superlite 'V')**, or any CARB certified coaxial hose certified for use with the VCS400-7 system. Hoses shall be installed to comply with Figure 2G of EO G-70-177-AA.

**\*California Health and Safety Code requires all components certified by the state to be clearly identified by a permanent identification of the manufacturer or re-builder.**

#### NOZZLE PROBLEMS AND REQUIREMENTS

1. Any nozzle, which has fewer than five unblocked holes, is defective, and shall be immediately tagged or locked out service until repaired or replaced
2. Any nozzle with a defective vapor valve shall be immediately removed from service as defective.

#### HOSE PROBLEMS AND REQUIREMENTS

1. Hoses with a length over (10 ½) feet.
2. A hose with any visible puncture or tear equivalent to a diameter of .136 inches (3.5) or greater is defective.
3. The hoses shall be installed so as to comply with Figure 2G of EO G-70-177-AA. (High hang hose configuration)
4. The length of the hose, which may be in contact with the island and/or ground when the nozzle is properly mounted on the dispenser, is limited to six inches (6") per loop.
5. Breakaway couplings are optional but, if installed, only certified breakaways with a valve, which closes the vapor path when separated, may be used. Breakaways, which do not closed the vapor path, are defective.

#### TESTING

Allowable GPM Range: 6-10 GPM

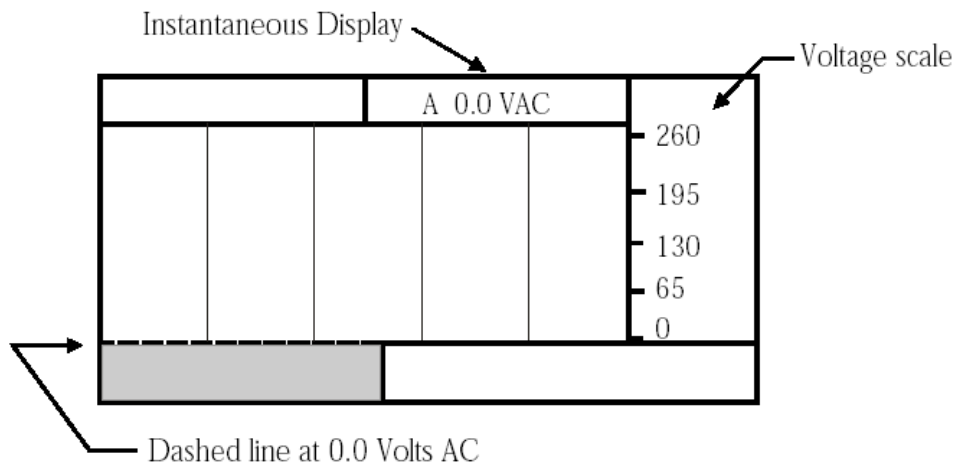
Allowable Air-to-Liquid (A/L) range: 6-8 GPM minimum, A/L = -1.45, 8-10 GPM minimum A/L 1.35. There is not maximum A/L limit.

## Executive Order G-70-177-AA

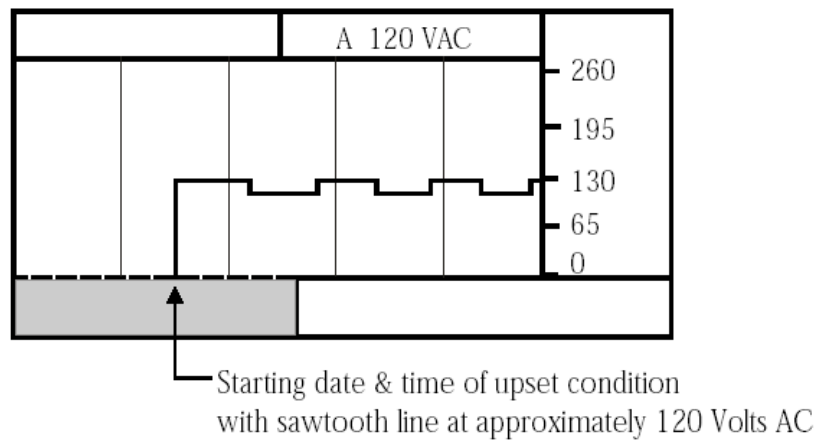
### Exhibit 2

### Figure 2F

#### Normal Trace



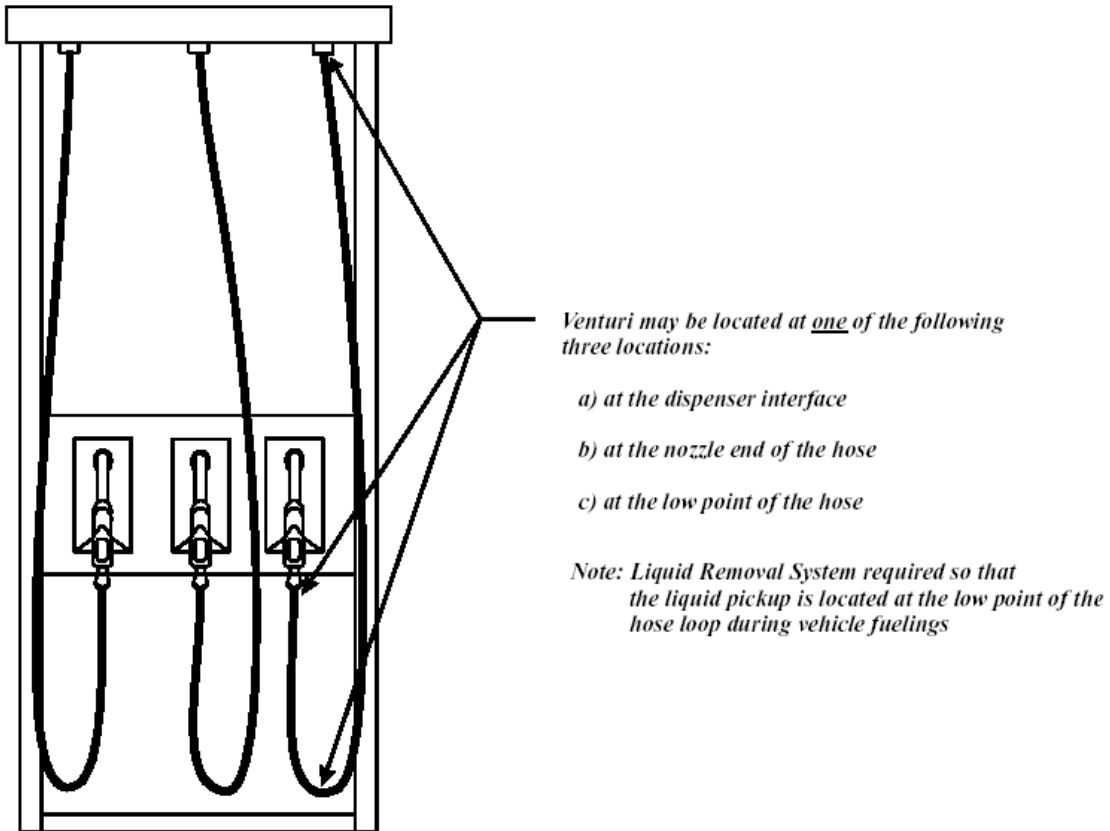
#### Abnormal Trace



## Executive Order G-70-177-AA

### Exhibit 2

### Figure 2G



#### NOTES:

1. Use 1 inch or larger inside diameter galvanized pipe for riser.
2. The maximum length of the hose assembly is 10-1/2 feet.
3. An ARB certified Liquid Removal System must be installed and maintained according to the manufacturer's current specifications.
4. A Flow Limiter is required on all dispensers that have a maximum flowrate in excess of 10gpm.
5. The hose may not touch the island or the ground when not in use. In the case of a dogbone island where the wider island ends protect the hose from damage by vehicle tires, the hose may touch the vertical face of the dogbone island at the option of the local air pollution control district.