CALIFORNIA AIR RESOURCES BOARD

ENHANCED VAPOR RECOVERY

Verifying Proper Installation of Equipment for Veeder-Root In-Station Diagnostic System

Informational Bulletin

December 30, 2019

IMPORTANCE OF THE DISPENSER INTERFACE MODULE WHEN UPGRADING THE POINT OF SALE SYSTEM OR INSTALLING NEW DISPENSERS

This informational bulletin is applicable for gasoline dispensing facilities equipped with Veeder-Root In-Station Diagnostics (ISD) system and intended for local air district inspectors and service technicians performing work on, and upgrading, dispensers and point-of-sale (POS) systems. When the dispensers or POS systems are upgraded for the Europay, MasterCard and Visa (EMV) chip card reader requirements[1], the service technician must ensure that the appropriate ISD dispenser interface module (DIM) is properly selected. The DIM is housed in the Veeder-Root TLS console communications bay and is designed to communicate with the gasoline dispensers installed on-site, identifying the volume of gasoline dispensed for each fueling transaction.

Due to the upcoming EMV chip card reader deadline, many GDF operators have recently upgraded or are planning to upgrade dispensers and POS systems. On several occasions immediately following this upgrade, air district staff have found that the ISD is unable to compile the volume of liquid gasoline dispensed for each fueling transaction and thus, ISD cannot make daily and weekly vapor collection assessments[2]. Service technicians upgrading the dispenser and/or the POS system must ensure that a compatible DIM is properly selected at that time. Failure to properly select the DIM will result in ISD not making collection assessments and reporting a “no test” or “NN” in the daily details report. Figure 1 shows the daily details report under normal operating conditions, with numeric values in the columns for each fueling point under “Collection Tests.”

Figure 1: Daily Details Report under Normal Operating Conditions

Status Codes: (W)Warn (F)Fail (D)Degradation Fail (G)Gross Fail
(ISD-W)ISD Self-Test Warning (ISD-F)ISD Self-Test Fail (N)No Test

	ISD	ISD	---CONTAINMENT TESTS---					STAGE		---COLLECTION TESTS		
	EVR	%UP	GROSS	DGRD	MAX	MIN	LEAK	I	VAPOR	FP1	FP2	FP3
DATE	STATUS	TIME	95%	75%	"WC	"WC	CFH	XFR	PRCSR	BLEND	BLEND	BLEND
07/01	PASS	100%	-2.6	-5.0	-5.0	-5.0	2			0.95	0.95	1.06
07/02	PASS	100%	-2.6	-5.0	-2.7	-5.0	2			0.88	1.01	1.00
07/03	PASS	100%	-2.8	-5.0	-5.0	-5.0	2N			0.97	0.91	1.06
07/04	PASS	100%	-2.8	-5.0	-2.7	-5.0	0N			0.93	0.83	1.00
07/05	PASS	100%	-2.2	-5.0	1.4	-5.0	2			0.89	0.86	1.01
07/06	PASS	100%	-2.8	-5.0	-5.0	-5.0	0N			0.99	0.93	1.11
07/07	PASS	100%	-1.7	-5.0	4.7	-5.0	0			0.85	0.90	1.07
07/08	PASS	100%	-1.7	-5.0	-3.1	-5.0	0			0.73	0.94	1.05
07/09	PASS	100%	-1.5	-5.0	2.2	-5.0	0			0.97	1.04	1.05

[1] Gas stations are required to incorporate EMV technology into their POS systems by October 1, 2020.
[2] The ISD system does not alarm to indicate when the nozzle vapor collection assessments are not made, allowing for the problem to persist.

At gasoline dispensing facilities that have recently upgraded dispensers or POS system, local air district inspectors should download the most recent 30 days of daily details reports and look for the text "NN" within the columns for all available fueling points. If all available fueling points[3] for a 30 consecutive days indicate "no test" or "NN," this is a likely indication that something is wrong with the DIM. If this issue is detected, a service technician should be dispatched to verify proper installation and setup of the DIM. Figure 2 provides an example of the daily details report where the DIM is not properly installed. Notice the "NN" in the columns for each fueling point under "Collection Tests."

Figure 2: Daily Details Report Where DIM is Not Properly Selected

Status Codes: (W)Warn (F)Fail (D)Degradation Fail (G)Gross Fail
(ISD-W)ISD Self-Test Warning (ISD-F)ISD Self-Test Fail (N)No Test

	ISD	ISD	---CONTAINMENT TESTS---					STAGE		---COLLECTION TESTS		
	EVR	%UP	GROSS	DGRD	MAX	MIN	LEAK	I	VAPOR	FP1	FP2	FP3
DATE	STATUS	TIME	95%	75%	"WC	"WC	CFH	XFR	PRCSR	BLEND	BLEND	BLEND
02/17	PASS	100%	0.0	-0.2	-0.0	-4.5	0		PASS	N N	N N	N N
02/18	PASS	100%	-0.0	-0.2	0.2	-2.2	0	PASS	PASS	N N	N N	N N
02/19	PASS	100%	-0.0	-0.2	4.1	-2.1	0		PASS	N N	N N	N N
02/20	PASS	100%	-0.0	-0.3	1.1	-2.5	0		PASS	N N	N N	N N

If an air district inspector suspects that the DIM is not correctly configured, the CARB Approved, Veeder Root ISD system Installation, Operation, and Maintenance manuals (IOMs) for both the Phase II EVR systems contain step by step instructions on how to retrieve ISD daily detail reports for the last 30 days. These instructions are found at the following websites:

- Assist system - Executive Order VR-202-X, Exhibit 10, Figure 30 - https://ww2.arb.ca.gov/resources/documents/vapor-recovery-phase-ii-evr-executive-orders; and
- Balance system – Executive Order VR-204-W, Exhibit 12, Figure 35 - https://ww2.arb.ca.gov/resources/documents/vapor-recovery-phase-ii-evr-executive-orders.

If you have questions regarding this informational bulletin, please contact your local air district (list of air district contacts is available at http://www.arb.ca.gov/vapor/evrdistrictcontacts.pdf) or CARB vapor recovery program staff at (916) 327-0900 or via email at vapor@arb.ca.gov. Additional information is available at CARB's vapor recovery program webpage at: http://www.arb.ca.gov/vapor/vapor.htm.

[3] There are occasions where a "no test" for a single fueling position is normal; for example, when a fueling position has been out of service due to a drive off, there is an individual card reader issue, or if the station sat idle for a several days due to maintenance or equipment upgrades.