



AMENDMENTS TO THE CURRENT ISD ENFORCEMENT POLICY

Enhanced Vapor Recovery (EVR) regulations require the installation of in-station diagnostic (ISD) system on the majority of gasoline dispensing facilities (GDFs) in California. ISD monitors the performance of the vapor recovery systems and alerts GDF operators of vapor recovery system malfunction so that repairs are made expeditiously. In June 2006, the Air Resources Board (ARB) and the California Air Pollution Control Officers Association (CAPCOA) jointly issued a recommended ISD enforcement policy which provided guidance on how ISD alarms will be enforced by air districts (current policy). Most districts have incorporated the recommended policy as conditions in construction and operating permits.

Evaluation of in-use ISD systems demonstrates that emissions are being reduced by early identification of vapor recovery performance degradation. However, ARB staff recently identified two types of alarms that may not be caused by malfunctioning of the vapor recovery system: transient and overpressure alarms. Transient alarms are by definition “self clearing”. If given sufficient time, a transient alarm will re-set itself to a non-alarm, normal operation mode. Overpressure alarms are reflective of a number of different alarms which indicate GDF system over pressurization. Most overpressure alarms occur during winter high Reid Vapor Pressure (RVP) gasoline use timeframes. In many cases, over pressure alarms do not reflect a vapor recovery system failure and therefore, may repeat without an associated, identifiable system failure. ARB recommends that air districts include the following amendments to the current policy of enforcing transient alarms and overpressure related alarms. With the exception of these two amendments, other provisions of the current policy are still applicable.

Amendment 1: Provide GDF Operator Relief from “Transient Alarms”

According to our analysis, ISD warning alarms that self-cleared prior to a service provider arriving on site occurred 7-8% of the time. To avoid paying for an unnecessary service call, the GDF owner/representative is now allowed to wait 48 hours prior to making a call for service, instead of being required to call as soon as reasonably possible as per the current policy. For those ISD warning alarms that clear prior to the call for service or prior to the arrival of the service provider, the official or designee is not required to request for service or may cancel a service call. It is still recommended that the facility attendant notify the responsible company official or their designee within two hours of detecting the alarm. All warning alarm recordkeeping requirements still apply.

Amendment 2: Provide GDF Operator Relief From “Overpressure Related Alarms”

ISD alarm data indicates a relatively high occurrence (>20%) of overpressure related alarms during the months when winter fuel is sold. The RVP of the winter fuel being higher than the low RVP summer fuel is a likely cause for many of these alarms. The new approach will reduce the cost of repetitive service calls that reveal no correctable cause of the failure (the service provider cannot identify associated equipment failures) during the months of November through March. If no problems (see below for testing that must be conducted for this demonstration) are found with the system following a service call triggered by an overpressure warning alarm, the station owner is not required to call again for service for overpressure warning alarms for 30 days. After this time period, an overpressure warning alarm will again trigger a required call for service. However, if there is again no correctable cause, the station owner will not be required to call for service for an overpressure alarm warning alarm until such an alarm occurs on or after April 1. Note that if a service call for an overpressure alarm does identify a vapor recovery system malfunction requiring repairs, the grace or “Free Pass” period is not applicable. It should be noted that there are no grace or “Free Pass” period for over pressure alarms that occur between April 1 and October 31. In order to be eligible for the “Free Pass” provision, one or more of the ISD over pressure related alarms listed in Table 1 of this advisory must be displayed on the ISD console, print out, or the electronic report via RS232 interface.

In order to properly document the occurrence of repetitive over pressure related ISD alarms and avoid potential penalties by the district, service providers must conduct the applicable test specified in the applicable ARB Approved Installation, Operation, and Maintenance Manual. The results of such testing shall be recorded on the maintenance log that is maintained at the GDF and made available to the district. The specific testing required for each of the currently certified systems is listed below:

- For Healy (Vacuum Assist) Phase II EVR systems equipped with the Veeder Root ISD system, see Table 5-1 “ISD Alarm Summary” of the Veeder Root ISD Install, Setup, and Operation Manual available at http://www.arb.ca.gov/vapor/eos/eo-vr202/eo-vr202k/vr202k_iom19.pdf
- For Healy (Vacuum Assist) Phase II EVR systems equipped with the INCON ISD system, see Appendix A “Alarm Codes” of the INCON Vapor Recovery Monitoring (VRM) Installation, Operation, & Maintenance Manual available at http://www.arb.ca.gov/vapor/eos/eo-vr202/eo-vr202k/vr202k_iom22.pdf
- For VST (Balance) Phase II EVR systems equipped with the Veeder Root ISD system, see Table 3 “ISD Alarm Summary” of the Veeder Root ISD Install, Setup, and Operation Manual available at <http://www.arb.ca.gov/vapor/eos/eo-vr204/vr204f-iom16.pdf>
- For EMCO Wheaton Retail (Balance) Phase II EVR systems equipped with the INCON ISD system, see Appendix A “Alarm Codes” of the INCON Vapor Recovery Monitoring (VRM) Installation, Operation, & Maintenance Manual available at <http://www.arb.ca.gov/vapor/eos/eo-vr208/vr208a-iom15.pdf>

Because many districts throughout the state have incorporated permit conditions that only allow certified service providers to reset or clear ISD warning and failure alarms, the service provider must now train the GDF operator on the proper procedure to clear and reset overpressure related warning alarms. All other ISD related alarms, those not listed in Table 1 of this advisory, should be responded

to in a normal fashion, only by certified service providers. ISD alarm may only be reset after a certified service provider has conducted appropriate testing to demonstrate the vapor recovery system has been restored to meet all operational requirements.

Duration of this Advisory

This advisory shall remain in effect until September 1, 2010.

If you have any questions regarding this advisory, please contact Mr. George Lew at (916) 327-0900 or via email at glew@arb.ca.gov or Mr. Louis Dinkler at (916) 324-9487 or via email at ldinkler@arb.ca.gov.

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Table 1: Eligibility Requirements for “Free Pass Provision” of Amendments to Current ISD Enforcement Policy

Phase II EVR System Description	Vapor Processor Description	ISD System Description	Description of Eligible ISD Over Pressure Related Alarm Condition	
			Message Displayed via ISD Console or Manual Print Out	Message Displayed via Electronic Access
Healy (Vacuum Assist)	Healy Clean Air Separator (CAS)	INCON Franklin Fueling Systems	Weekly Ullage Pressure Monitoring Warning Weekly Ullage Pressure Monitoring Fail Monthly Ullage Pressure Monitoring Warning Monthly Ullage Pressure Monitoring Fail	Weekly Ullage Pressure Monitoring Warning Weekly Ullage Pressure Monitoring Fail Monthly Ullage Pressure Monitoring Warning Monthly Ullage Pressure Monitoring Fail
		Veeder Root	ISD GROSS PRESSURE WARN ISD GROSS PRESSURE FAIL ISD DEGRD PRESSURE WARN ISD DEGRD PRESSURE FAIL	Containment Monitoring Gross Failure Warning Containment Monitoring Gross Failure Alarm Containment Monitoring Degradation Failure Warning Containment Monitoring Degradation Failure Alarm
VST (Balance)	VST ECS (membrane)	Veeder Root	ISD GROSS PRESSURE WARN ISD GROSS PRESSURE FAIL ISD DEGRD PRESSURE WARN ISD DEGRD PRESSURE FAIL ISD VP PRESSURE WARN ISD VP PRESSURE FAIL	Containment Monitoring Gross Failure Warning Containment Monitoring Gross Failure Alarm Containment Monitoring Degradation Failure Warning Containment Monitoring Degradation Failure Alarm Vapor Processor Over Pressure Failure Warning Vapor Processor Over Pressure Failure Alarm
	Veeder Root Vapor Polisher (carbon canister)		ISD GROSS PRESSURE WARN ISD GROSS PRESSURE FAIL ISD DEGRD PRESSURE WARN ISD DEGRD PRESSURE FAIL ISD VP PRESSURE WARN ISD VP PRESSURE FAIL	Containment Monitoring Gross Failure Warning Containment Monitoring Gross Failure Alarm Containment Monitoring Degradation Failure Warning Containment Monitoring Degradation Failure Alarm Vapor Processor Over Pressure Failure Warning Vapor Processor Over Pressure Failure Alarm
EMCO Wheaton Retail (Balance)	HIRT VCS 100 (thermal oxidizer)	INCON Franklin Fueling Systems	Weekly Ullage Pressure Monitoring Warning Weekly Ullage Pressure Monitoring Fail Monthly Ullage Pressure Monitoring Warning Monthly Ullage Pressure Monitoring Fail Vapor Processor Warning Vapor Processor Fail	Weekly Ullage Pressure Monitoring Warning Weekly Ullage Pressure Monitoring Fail Monthly Ullage Pressure Monitoring Warning Monthly Ullage Pressure Monitoring Fail Vapor Processor Warning Vapor Processor Fail