



# Special Advisory

## ENHANCED VAPOR RECOVERY

### Response to Winter Season ISD Pressure Alarms

Number 405-B

October 10, 2011

#### INTRODUCTION

Enhanced Vapor Recovery (EVR) regulations require that gasoline dispensing facilities (GDF) with annual throughput greater than 600,000 gallons must install an In-Station Diagnostics (ISD) system to monitor vapor recovery system performance. ISD systems are effective year round in reducing gasoline vapor emissions because the system operator is quickly alerted of an equipment problem. Thus, ISD delivers important air quality and health benefits.

Under the current enforcement policy, a service call is required when an ISD alarm occurs. This advisory amends the current enforcement policy to benefit the station operator by reducing the costs associated with service calls to respond to winter season ISD pressure alarms.

Data collected by the Air Resources Board (ARB) staff indicate that during the winter fuel season, the number of pressure related ISD alarms increases significantly. ARB staff has determined that most of these alarms are not associated with an EVR equipment problem. The most likely cause of the increased number of alarms is the higher volatility of gasoline used in the winter season. Therefore, this advisory reduces the number of service calls in response to winter season pressure related alarms. ARB staff has begun a long-term study of these alarms and is committed to developing a permanent solution that will eliminate pressure alarms that are not related to malfunctioning equipment.

#### How to Respond to Over Pressure (OP) Alarms in the Winter

From November 1 to March 1, a service call or equipment testing is not required prior to clearing the ISD OP alarms that are listed in Table 1 of this advisory. This action is being instituted because field data show that in many cases no equipment failure can be identified during the response to winter season OP alarms.

The required response to OP alarms is dependent on the date and is detailed below.

Date Range	Required Response to OP Alarms
Nov. 1 to Mar. 1	No service or equipment testing is required prior to clearing the OP alarms listed in Table 1.
Mar. 2 to Oct. 31	Requirements of the current enforcement policy, District permit conditions, or ARB approved Phase II EVR Executive Orders and Veeder-Root ISD or Incon Vapor Recovery Monitoring (VRM) Installation, Operation and Maintenance (IOM) manuals apply.

**Local districts will not require any service calls or equipment testing in response to ISD over pressure alarms that occur November 1 through March 1.**

During this four month period, there is no requirement for a service call or equipment testing prior to clearing any of the ISD OP alarms that are listed in Table 1 of this advisory. Because some districts have incorporated permit conditions that only allow certified service providers to reset or clear ISD warning and failure alarms, the GDF operator may need to have alarms reset by an authorized service provider or seek training by an authorized service provider on the proper procedure to clear and reset OP warning alarms.

**Local districts will require service calls and equipment testing in response to all ISD over pressure alarms that occur from March 2 to October 31.**

All OP alarms that occur from March 2 to October 31 will require the GDF operator to call for service if the alarm is still active 48 hours after the first appearance of the alarm.

**Record Keeping Requirements**

In order to properly document a required response to an ISD OP alarm (March 2-October 31) and avoid penalties imposed by the district, service providers must conduct the testing specified in the current enforcement policy, District Permit to Operate, or ARB approved Phase II EVR Executive Orders and Veeder-Root ISD or Incon VRM IOM manuals. As required by district regulations and permit conditions, both the service provider and GDF operator should: 1) maintain a written record of all the ISD alarms; and 2) if applicable, keep records of test results, equipment inspections, and equipment maintenance and repairs.

**This Advisory will remain in effect until formally rescinded by the Air Resources Board.**

**Questions**

If you have any questions regarding this advisory, please contact Ms. Melinda Weaver by phone at (916) 322-8918 or by email at [mweaver@arb.ca.gov](mailto:mweaver@arb.ca.gov).

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**Table 1: ISD Over Pressure Alarms Eligible for Relief from Service Call Requirements from November 1 to March 1**

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 W Weekly Ullage Pressure F Monthly Ullage Pressure Monthly Ullage Pressure	Weekly Ullage Pressure Warning Weekly Ullage Pressure Failure Monthly Ullage Pressure Warning Monthly Ullage Pressure Failure
		Veeder Root	ISD GROSS PRESSURE WARN ISD GROSS PRESSURE FAIL ISD DEGRD PRESSURE WARN ISD DEGRD PRESSURE FAIL	CONTAINMENT GROSS OVER PRESSURE CONTAINMENT GROSS OVER PRESSURE CONTAINMENT PRESSURE DEGRADATION CONTAINMENT PRESSURE DEGRADATION
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 GROSS OVER PRESSURE CONTAINMENT GROSS OVER PRESSURE CONTAINMENT PRESSURE DEGRADATION CONTAINMENT PRESSURE DEGRADATION VAPOR PROCESSOR OVER PRESSURE VAPOR PROCESSOR OVER PRESSURE
	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 GROSS OVER PRESSURE CONTAINMENT GROSS OVER PRESSURE CONTAINMENT PRESSURE DEGRADATION CONTAINMENT PRESSURE DEGRADATION VAPOR PROCESSOR OVER PRESSURE VAPOR PROCESSOR OVER PRESSURE
EMCO Wheaton Retail (Balance)	HIRT VCS 100 (thermal oxidizer)	INCON Franklin Fueling Systems	Weekly Ullage Pressure W Weekly Ullage Pressure F Monthly Ullage Pressure Monthly Ullage Pressure	Weekly Ullage Pressure Warning Weekly Ullage Pressure Failure Monthly Ullage Pressure Warning Monthly Ullage Pressure Failure