Air Resources Board

Alan C. Lloyd, Ph.D.
Agency Secretary

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Arnold Schwarzenegger
Governor

September 7, 2005

Mr. Tim Hurlocker
Director of Gasoline Operations
Costco
999 Lake Drive
Issaquah, Washington 98027

Dear Mr. Hurlocker:

This letter is in response to your September 1, 2005, letter to Kathleen Tschogl, Air Resources Board (ARB) Ombudsman. In your letter you express concerns with the ARB Enhanced Vapor Recovery (EVR) regulations. Specifically, you assert that the EVR regulations are keeping valuable pollution control technologies off the market. The purpose of this letter is to address your concerns and provide clarification regarding the EVR program.

The EVR regulations were approved by the ARB in March 2000, in response to the need to improve air quality in California as mandated under both state and federal laws. EVR is responsible for introducing substantially better vapor recovery products into the marketplace as demonstrated by improved compliance rates measured by enforcement staff. I note that your concerns are directed toward the EVR Phase II system regulations that became effective April 1, 2005, for new gasoline dispensing facilities (GDF). As you point out, portions of the EVR regulations are technology forcing. Technology forcing regulations can only work if there is an incentive for manufacturers to take risks to develop improved products. Healy Systems, Inc. (Healy), much like Phil-Tite Corporation for Phase I, took the necessary risks and developed and certified a system which passed all of the stringent EVR performance standards and requirements. Healy's success demonstrates technological leadership that will eventually enable other manufacturers to also certify their systems.

That is not to imply that some of the issues you raise are not valid. We are aware of several of the concerns you referenced and ARB is investigating each issue that is supported by data. The following are specific responses to issues you assert have negatively affected Costco:

1. Healy backlog – I have discussed with representatives from Healy the status of Healy Phase II EVR system backlog. Healy has recently agreed to place a high priority in producing Phase II EVR components and has committed to the following shipment dates for the following orders:

Month Order Submitted	Shipment Date*
June 2005	September 16, 2005
July 2005	September 30, 2005
August 2005	October 14, 2005
September 2005 and subsequent	4 to 6 weeks from date of order

* or later shipment date when requested by gasoline dispensing facility operator/owner, contractor, or distributor

The above shipment schedule will eliminate the backlog of Phase II EVR system components and improve the planning process for new installations and major modifications of existing installations. We believe the above shipment dates are reasonable and do not believe there is need for regulatory relief at this time.

ARB staff will track and monitor this situation closely. Please notify us if the above dates are not met.

2. Concern with Healy Clean Air Separator – All vapor recovery systems and components must receive State Fire Marshal approval (with Underwriters Laboratories (UL) being a requirement of the State Fire Marshal) prior to being issued a certification Executive Order. The Healy Clean Air Separator received such approvals. The State Fire Marshal and State Water Resources Control Board have determined that the Clean Air Separator is not an aboveground storage tank under their respective regulations. These findings were documented in our April 29, 2005 letter to the Western States Petroleum Association (WSPA) posted on our webpage at http://www.arb.ca.gov/vapor/eos/eo-vr201/wspa042905.pdf

3. Lack of reliability of Healy nozzles – It is unclear from your comment if you are referring to the Healy Model 800 ORVR compatible nozzle or the Healy Model 900 EVR nozzle. The Model 900 EVR nozzle has passed the most stringent operational tests ever applied to an ARB certified nozzle. We would be particularly interested in data documenting your concerns as they apply to the Healy Model 900 EVR nozzle. We would also be interested in data documenting a lack of reliability in the Model 800 ORVR nozzle. We are aware of previous issues with the Healy Model 800 ORVR nozzles, but believe that those issues were resolved in 2003.

4. Excessive Healy vacuum motor failures – We are aware of the failures that residue caused for Healy vacuum motors. The explanations we received indicate the unanticipated residue problem was caused by the Healy pump operating at a higher vacuum than the Gilbarco VaporVac pump. We also understand the excessive failures stop when a purging process was instituted before installation of the Healy pump. If the failure of the Healy pump is still an issue, we would appreciate any data documenting continued excessive failure, particularly those occurring after purging or attempted purging of residue.

5. Certification of Healy Model 807 Swivel breakaway – In order to maintain the integrity of the EVR program, ARB requires all EVR certified systems and components to be subjected to an operational test of at least 180 days. Until the Model 807 swivel breakaway is certified to EVR standards, it will not be part of the Healy Phase II EVR system. COSTCO may wish to submit an application to certify the Healy Model 807 swivel breakaway at a COSTCO facility equipped with an EVR Phase II system.

6. Cost of Healy 900 nozzles – Although you state that the Healy 900 EVR nozzle is three times more expensive than the Husky V34 nozzle, a comparison to Healy Model 800 ORVR nozzle cost is more appropriate. Our information from a major equipment supplier on assist nozzle list prices is shown in the table below. We would be interested in investigating this matter further, if you are willing to share cost information with us.

Assist Nozzle	List Price
Healy Model 900 (EVR)	$360.00
Healy Model 800 (ORVR)	$298.00
OPW 12VW (pre-EVR)	$265.60
Husky V34 (pre-EVR)	$221.80
Emco Wheaton 4505 (pre-EVR)	$139.00

7. ORVR Healy systems over pressurizing USTs – We are aware of this issue and have been investigating this in conjunction with CAPCOA and with assistance from Healy. When Healy Systems began the development of their EVR nozzle, they learned that as the vapor collection boot on the nozzle fatigued, the ability of the Model 800 ORVR nozzle to sense ORVR vehicles was reduced. This problem can be ameliorated through increased nozzle inspection and maintenance. The Model 900 EVR nozzle corrects this problem by moving the nozzle boot farther forward on the nozzle spout. This position ensures that a boot at its maximum fatigue compression will still have a tight fill-pipe interface.

I want to conclude this letter by briefly addressing your comments on membrane processors and your requested actions. We too believe membrane processors are promising alternatives which may be able to meet our stringent EVR performance standards. However, although several efforts have been attempted to achieve certification, no membrane technology system has yet to pass all EVR Phase II requirements. In some cases, minor components have failed, thereby forcing ARB staff to terminate the 180 days (minimum) operational test. However, it should be recognized that ARB is required by statute to certify "systems." That means that all components must pass the whole system test unless reasonable arguments can be presented as to why a previously certified component's failure can be decoupled from the rest of the system. In all termination cases, we have tried to be reasonable, fair, and consistent. The absence of serious issues during the Healy operational test makes their success even more impressive.

You also requested three actions to partly ameliorate the current situation:

1. Allow 48 hour repair downtime for OPW Vaporsaver – As you point out, the ARB Executive Order is silent on this issue. Local air districts have the sole authority to permit and the primary authority to enforce air pollution control equipment break down regulations applicable to stationary sources. This particular issue can only be directly addressed by individual districts. The ARB, where appropriate, can encourage or recommend approaches such as you suggest, but we do not have the authority to change district policy or regulations without pursuing the complex, legal process mandated in the Health and Safety Code.

   It is our understanding that part of the issue is that the current certification identifies a non-operating Vaporsaver as a defect. Allowing a non-operating Vaporsaver to operate must be consistent with Section 94006 (Title 17 of the California Code of Regulations), which defines a defect as having "the potential to degrade fueling point or system efficiency by at least five percent." All vapor recovery equipment with defects must be shut down or "tagged out". To address your request for repair downtime, we are pursuing modification of G-70-204 to allow a GDF with a non-operating Vaporsaver to operate for a certain period of time before it is identified as a defect.

2. Delay the 'dripless nozzle' EVR module – Although we understand that some manufacturers are having difficulty achieving the dripless nozzle performance standard, it should be noted that Healy was able to certify the Model 900 nozzle at substantially below the standard. It should also be noted that no Phase II operational test has been terminated due to this standard, and at least two other manufacturers have submitted information indicating they would be able to comply with the standard.

3. Allow use of the Healy Model 807 Swivel breakaway – I have previously discussed this issue. ARB staff will not compromise the integrity of the EVR certification process by circumventing the testing process. I would recommend Costco discuss the issue of breakaway positioning in the hose assembly with Healy.

I trust that this letter has provided some additional clarity as to the ARB staff position on your concerns. We are always willing to further explore your existing concerns or new concerns as they arise. Feedback from vapor recovery equipment consumers such as Costco is invaluable in making the EVR program better. Please feel free to contact me by email at wloscuto@arb.ca.gov or by phone at (916) 445-3742, or George Lew, Chief of our Engineering and Certification Branch, by email at glew@arb.ca.gov or by phone at (916) 327-0900.

Sincerely,

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