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Secretary for
Environmental Protection

Air Resources Board

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Arnold Schwarzenegger
Governor

September 29, 2009

Mr. Bill Nelson
Franklin Fueling Systems
Vice President of Engineering
3760 Marsh Road
Madison, Wisconsin 53718

Dear Mr. Nelson:

In letters dated January 2, 2009, and January 16, 2009, Franklin Fueling Systems (FFS) requested modifications to the spout assembly used in the production of the Model 900 nozzle, certified on the Healy Phase II Enhanced Vapor Recovery (EVR) Executive Orders (EO) VR-201 series and VR-202 series. The proposed modifications include:

- A. New ResinLab EP1238 Epoxy for joining the threaded sections of the spout assembly together;
- B. Modification of the male threads on the bent portion of the spout assembly to provide a small holding force to prevent misalignment; and
- C. Modification of the external geometry of the tip portion of the nozzle spout to allow the Model 900 nozzle to be compatible with the new Ford capless fill neck design.
- D. New in-house curing procedure using elevated temperature to provide a more consistent cure of the epoxy; and
- E. New in-house spout torque testing procedure.

To support this request, FFS also submitted in-house test data showing improved average breaking torques for the new epoxy and curing procedure.

To evaluate FFS's request, ARB staff required FFS to install the Model 900 nozzles with the new geometry spout, threads, and epoxy at a gasoline dispensing facility (GDF) in Sacramento. After 30 days of use in the field, two nozzles were subsequently removed to evaluate the strength of the spout epoxy bond. Using a torque test tool provided by FFS and their in-house torque test procedure, ARB staff conducted torque testing on two joint locations on each of the nozzle spouts (spout tip and spout base). For comparison, ARB staff also conducted the same torque test on a spout assembly that

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was manufactured using the existing certified epoxy and spout design. The torque test results demonstrated that the new epoxy and spout thread design provides a joint strength that was a least three times greater than the currently certified epoxy and spout design.

Based on the information provided by FFS and the results of the evaluations conducted by ARB staff, we have determined that the modifications will not adversely affect the performance of the Healy Phase II EVR System. No changes to EOs VR-201 and VR-202 are required, and FFS is free to begin marketing the Healy Phase II Enhanced Vapor Recovery Systems with the modifications discussed in this letter. FFS will inform ARB in writing of the nozzle serial numbers incorporating the new spout assemblies. Approvals of the requested modifications have been received from the other four agencies as required by ARB Certification Procedure 201 (CP-201).

Lastly, per item C above, there is a physical difference in the external spout tip portion of the spout assembly. This new spot configuration is to ensure capability with the new Ford capless fill neck design. For ease of identification, below are pictures of the two spout tips that will be seen at GDF installations that use the Healy Model 900 nozzle.



Current Design



New Design

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Should you have any questions or concerns regarding this letter, please contact either Paul Marzilli at (916) 445-7431 or via email at pmarzill@arb.ca.gov, or Pat Bennett at (916) 322-8959 or via email at pbennett@arb.ca.gov.

Sincerely,


for William V. Loscutoff, Chief
Monitoring and Laboratory Division

cc: John Marvin
Bay Area Air Quality Management District

Kevin Tokunaga
Glenn County Air Pollution Control District

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Yolo-Solano Air Quality Management District

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