

**AIR RESOURCES BOARD**2020 L STREET  
P.O. BOX 2815  
SACRAMENTO, CA 95812

August 29, 1994

Donald L. Leininger  
Lead Product Engineer  
OPW Fueling Components  
Post Office Box 405003  
Cincinnati, Ohio 45240-5003

#94-19

Dear Mr. Leininger:

Approval of the Aluminum Spout for OPW 11VAA and 11VAI Nozzles

You requested California Air Resources Board (CARB) approval of the aluminum spout for the OPW Model 11VAA and 11VAI bootless type vapor recovery nozzles.

The new design for the spout of the OPW Model 11VAA and 11VAI consists of an aluminum outer tube, a nylon inner tube (for liquid), and a nylon tube for the vacuum shutoff mechanism. The spout is assembled to the nozzle with a plastic spout nut. Both the stainless steel and the aluminum nozzle spout assemblies are equipped with a shear section to permit breakaway should the valve be subjected to excessive bending load. The shear groove is located in the tube of the aluminum spout, whereas in the stainless steel spout the shear groove is located in the spout nut. Both spouts are very similar in functionality, but it is more cost effective to manufacture the aluminum spout than the stainless steel spout.

My staff has verified the efficiency of the aluminum spout by performing an Air to Liquid Ratio test on both the aluminum and stainless steel spout and came to the conclusion that there are no significant differences between the two spouts in regards to vapor flow characteristics.

As required by the Air Resources Board certification procedures, you requested the approval of the Division of Occupational Safety and Health, the Office of the State Fire Marshal and the Department of Food and Agriculture, Division of Measurement Standards. The necessary approvals have been obtained from these agencies.

I find that the use of the aluminum spout as an alternate component to that of the stainless steel spout for all OPW 11VAA and OPW 11VAI series nozzles when installed in accordance with the manufacturer's instructions, will not adversely affect the performance of vapor recovery systems on which they are installed. Therefore, the OPW Fueling Components OPW 11VAA and OPW

Donald Leininger

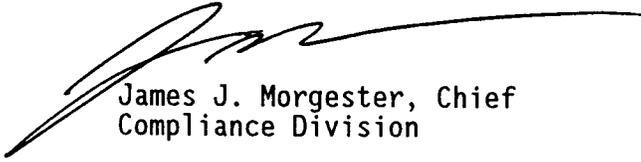
2

August 29, 1994

11VAI series nozzles with aluminum spouts are certified for use with Phase II vapor recovery systems for which the OPW 11VAA and OPW 11VAI series nozzles with stainless steel spouts are certified.

Should you have any questions or need further assistance, please contact Ms. Christine McKenzie at (916) 324-7658 or Ms. Laura Sullivan McKinney at (916) 327-1525.

Sincerely,



James J. Morgester, Chief  
Compliance Division

cc: Mr. Kenneth Kunaniec, Chairman  
CAPCOA Vapor Recovery Committee

Mr. Gary Hunter, Manager  
CARB Compliance Assistance Section

David Oberrecht  
Lead Product Engineer  
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