



Winston H. Hickox
Secretary for
Environmental
Protection

Air Resources Board

Alan C. Lloyd, Ph.D.
Chairman

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Gray Davis
Governor

June 7, 1999

Eric Butterfield
Senior Design Engineer
Catlow Inc.
2750 U.S. Route 40
Tipp City, Ohio 45371

99-6

Dear Mr. Butterfield:

Catlow Model IC3 Inverted Coaxial Hose Swivel

You requested California Air Resources Board (CARB) certification of the Catlow Model IC3 Swivel for vapor recovery systems. This component is used between the vapor recovery coaxial hose and nozzle assembly or between the dispenser and hose. The swivel is designed to permit rotation of the hose or nozzle and reduce torsional stresses on the hose-nozzle assembly.

The Catlow Model IC3 Swivel consists of an outer fluid carrying assembly and an inner vapor carrying assembly. The swivel is made up of two 45 degree elbows. The elbows are joined by means of a nylon ring that acts as both a bearing and retaining ring. The rotating surfaces are sealed by means of an o-ring. The outlet end is fitted with a rotating steel nut having the inverted hose thread and the inner hose stub machined into the aluminum elbow. The inner vapor recovery assembly is designed with an aluminum elbow casting and a brass tube sealed by an o-ring which is similar to the co-axial hose.

As required by the Certification Procedures for Gasoline Vapor Recovery Systems at Service Stations, the approvals of the three State agencies are a precondition to certification by the Air Resources Board. The appropriate letters of approval have been received and are listed as follows:

Department of Food and Agriculture,
Division of Measurement Standards
March 12, 1998

Department of Occupational Safety and Health
October 7, 1998

Department of Forestry and Fire Protection
Office of the State Fire Marshal
January 5, 1999 GVRC 005:030:018

I find that the use of Catlow Model IC3 Swivel, when installed in accordance with the manufacturer's instructions and the conditions listed above, will not adversely affect the performance of vapor recovery systems on which it is installed. Therefore, Catlow Model IC3 Swivel is certified for use with CARB certified Phase II vapor recovery.

If you have any questions or wish to discuss this matter further, please call Joe Guerrero at (916) 324-7343 or Laura McKinney at (916) 327-1525.

Sincerely,

INTERNET VERSION

James J. Morgester, Chief
Compliance Division

cc:
Mr. Jim Johnston, Chairman,
CAPCOA Vapor Recovery Committee
Monterey Bay Unified APCD
24580 Silver Cloud CT.
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