State of California
AIR RESOURCES BOARD

Executive Order G-70-110

Certification of Stage I and II Vapor Recovery Systems
for Methanol Fueling Facilities

WHEREAS, the Air Resources Board (the "Board") has established, pursuant to Sections 39600, 39601, and 41954 of the Health and Safety Code, certification procedures for systems designed for the control of gasoline vapor displaced during the filling of storage tanks at service stations ("Stage I vapor recovery systems"), and gasoline vapor emissions during motor vehicle fueling operations ("Stage II vapor recovery systems") in its "Certification Procedures for Gasoline Vapor Recovery Systems at Service Stations", as last amended December 4, 1981 (the "Certification Procedures"), incorporated by reference in Section 94001 of Title 17, California Administrative Code;

WHEREAS, the Board has established, pursuant to Sections 39600, 39601, and 41954 of the Health and Safety Code, test procedures for determining compliance of Stage I and Stage II vapor recovery systems with emission standards in its "Test Procedures for Determining the Efficiency of Gasoline Vapor Recovery Systems at Service Stations" as last amended September 1, 1982 (the "Test Procedures"), incorporated by reference in Section 94000 of Title 17, California Administrative code;

WHEREAS, the California Energy Commission has applied for certification of a vapor recovery system using recommended components and materials of construction installed at methanol fuel installations where the fuel is pure methanol;

WHEREAS, the California Energy Commission has developed a "Materials of Construction" list identifying vapor recovery equipment and the material of construction that is compatible with methanol fuel and can be used in the construction of vapor recovery systems at methanol fuel stations;

WHEREAS, the vapor recovery system using the equipment identified on the "Materials of Construction" list has been evaluated pursuant to the Board's Certification Procedures and Test Procedures;

WHEREAS, Section VIII.A of the Certification Procedures provides that the Executive Officer shall issue an order of certification if he or she determines that a vapor recovery system conforms to all of the requirements set forth in paragraphs I through VII of the Certification Procedures;

WHEREAS, I find that a vapor recovery system using equipment identified in the "Materials of Construction" list specified by the California Energy Commission conforms with all the requirements set forth in paragraphs I through VII of the Certification Procedures and is at least 95 percent effective for attendant and/or self-serve use at gasoline service stations.

NOW, THEREFORE, IT IS HEREBY ORDERED that the California Energy Commission vapor recovery system using recommended components and materials of construction for pure methanol fuel installations is hereby certified for use in Stage I and Stage II vapor recovery systems. The components are shown in Exhibit I.

Executed at Sacramento, California this 20th day of January, 1987.

James D. Boyd
Executive Officer

EXHIBIT I

METHANOL FUELING FACILITIES
MATERIALS OF CONSTRUCTION

| ITEM | QUANTITY | DESCRIPTION-MATERIALS |
|---|---|---|
| 1 | 1 | 10,000-Gallon Steel, Double Wall Underground Storage Tank with Fiberglass Coating |
| 2 | 1 | Tokheim Model No. 785-PR-ME Self-Contained Suction Pump |
| 3 | 1 | CNI NO. 9912-1A Counterbalanced Overhead Hose Retractor |
| 4 | 1 | Goodall No. N2494 3/4 In. X 13 Ft Cross-Linked Polyethylene Hose With Polyester Braid and Hypalon Cover with 3/4 In. MNPT Ends |
| 5 | 2 | Wedgon No. PS-3445-VRM 45 Deg. Cabinet Swivel, 3/4 In. |
| 6 | 1 | EMCO Wheaton A3003-010 Automatic Fill Nozzle With Vapor Recovery and Polyethylene Boot |
| 7 | 1 | Protectoseal No. C4952F 2 In. Flame Arrester With Cast Iron Body and Stainless Steel Arrester |
| 8 | 1 | EMCO Wheaton A677-003 1-1/2 In. Foot-Valve Extractor with EMCO Wheaton A584-003 Extractor Pipe Cap |
| 9 | 1 | EMCO Wheaton A560-002 Extractor Wrench |
| 10 | 3 | EMCO Wheaton A717-030 Heavy Duty 12 In. Diameter Manhole |
| 11 | 1 | AMF Cuno 1B2 Product Filter Housing and AMF Cuno D-CCSB-2 Cartridge Filter |
| 12 | 1 | EMCO Wheaton A10 Flow Regulator With Celcon Piston |
| 13 | 1 | EMCO Wheaton A84-003 2 In. Pressure/Vacuum Vent Set for 8 Oz/In2 Pressure and 0.5 Oz/In2 Vacuum With Steel Body and Buna-N Gasket |
| 14 | 1 | EMCO Wheaton A439-005 1-1/2 In. Double Poppet Foot Valve |
| 15 | 1 | EMCO Wheaton A719-001 Heavy Duty 12 In. Diameter Sealed Manhole |

| ITEM | QUANTITY | DESCRIPTION-MATERIALS |
|---|---|---|
| 16 | 1 | EMCO Wheaton A79-004 Float Vent Valve Extractor Assembly |
| 17 | 1 | Marran Model LA-04 Leak Alert Alarm Panel |
| 18 | 1 | Marran Model LALS-1 Liquid Sensing Probe |
| 19 | 4 | Teleflex No. 60-10020-L24 Flexible 2-In. I.D. Teflon Pipe Connector 24 In. Long |
| 20 | 2 | Teleflex No. 60-10020-L30 Flexible 1 1/2 In. I.D. Teflon Pipe Connector 30 In. Long |
| 21 | 1 | EMCO Wheaton A30-014 Fill Adapter |
| 22 | 1 | EMCO Wheaton A39-002 Fill Cap |
| 23 | 1 | EMCO Wheaton A76-003 Vapor Adapter |
| 24 | 1 | EMCO Wheaton A99-001 Vapor Cap |
| 25 | 2 | Husky Corp. Model 1+VI 3/4-In. Hose Swivel |
| 26 | 1 | Protectoseal No. C4951 1-In. Flame Arrester with Cast Iron Body and Stainless Steel Arrester |
| 27 | - | Ameron or CIBA-GEIGY Dualoy-3000/UL Product Piping, With Two-Part Epoxy Adhesive C20HT or New Black Iron Pipe |
| 28 | 1 | Storage Tank Drop Tube, Black Iron Pipe |
| 29 | - | Pipe Tread Sealant, Teflon Tape or Liquid |
| 30 | 1 | Vapor Recovery Hose at Dispenser, Standard Materials for Petroleum Fuel |