Mr. Eric Riffle  
Manager, Product Development  
OPW Fueling Components  
9393 Princeton-Glendale Road  
Hamilton, OH 45011

RE: OPW Onboard Refueling Vapor Recovery (ORVR) Systems with the 21GV Nozzle

Dear Mr. Riffle:


The systems tested for approval are the OPW21GV nozzle when used with M34 vacuum assist hoses and breakaways, or with Veeder-Root/VST hanging hardware, as alternate components for use with ORVR VaporVac and ORVR WayneVac systems. Enclosed excerpts from the final report list the required components for each system.

In accordance with 30 TAC §115.243(2) the above described systems and components, as applicable to existing or new installations, are hereby approved as ORVR Compatible Stage II systems for use in Texas when installed and operated in accordance with manufacturer recommendations.

If any further assistance is needed, you may contact Koy Howard of my staff at (512) 239-2306 or kohoward@tceq.state.tx.us.

Sincerely,

[Signature]
David C. Schenbach, P.E.  
Chief Engineer

Enclosure

DCS/KH/sy
OPW 21GV ORVR Nozzle with M34 Vacuum Assist Hoses & Breakaways
Alternate components for use with ORVR VaporVac and ORVR WayneVac systems

List of Critical Components

Attachment 1

The Gilbarco VaporVac system and the Dresser Wayne WayneVac system are vacuum assist Stage II vapor recovery systems that are available as factory installed options or field retrofit kits by each of the respective companies for their specified dispensers.

The Gilbarco VaporVac system is also available as a factory installed option or field retrofit kit on some Schlumberger dispenser product lines.

The Gilbarco ORVR VaporVac and the Dresser Wayne ORVR WayneVac systems previously evaluated by Ken Wilcox Associates, Inc. and the TCEQ use specially designed hanging hardware (nozzle, primary hose, breakaway & whip hose) to enable compatibility with ORVR vehicles. Ken Wilcox Associates, Inc. and the TCEQ have evaluated and approved the OPW 21GV nozzle with M34 vacuum assist hoses and breakaways as alternate components that can be used with the Gilbarco ORVR VaporVac and the Dresser Wayne ORVR WayneVac systems.

The following system components for VaporVac and WayneVac remain consistent with each manufacturer’s approved specifications.

1. Control electronics and power supply
2. Vapor pump/motor assembly
3. Solenoid vapor valve on dispensers manufactured before 7/31/02. No solenoid vapor valve on dispensers manufactured after 8/1/02. (Gilbarco VaporVac only)
4. Hose outlet casting.

The following system components are new or modified for ORVR VaporVac and ORVR WayneVac applications:

1. Gilbarco, Inc. VaporVac and Wayne WayneVac systems – No new or modified components
2. ORVR Hanging Hardware:
   • Nozzle (with ORVR valve)
     ▪ OPW 21GV ORVR nozzle (part number 21GV-0XXX)
   • Primary Hose
     ▪ Any primary hose listed in CARB Executive Order G-70-150-AE or G-70-153-AD
   • Breakaway (Reconnectable and Non-Reconnectable)
     ▪ Any breakaway listed in CARB Executive Order G-70-150-AE or G-70-153-AD
   • Whip Hose (with or without flow limiter)
     ▪ Any whip hose listed in CARB Executive Order G-70-150-AE or G-70-153-AD
OPW 21GV ORVR Nozzle with Veeder-Root/VST Hanging Hardware
Alternate components for use with ORVR VaporVac and ORVR WayneVac systems

List of Critical Components

Attachment 1

The Gilbarco VaporVac system and the Dresser Wayne WayneVac system are vacuum assist Stage II vapor recovery systems that are available as factory installed options or field retrofit kits by each of the respective companies for their specified dispensers.

The Gilbarco VaporVac system is also available as a factory installed option or field retrofit kit on some Schlumberger dispenser product lines.

The Gilbarco ORVR VaporVac and the Dresser Wayne ORVR WayneVac systems previously evaluated by Ken Wilcox Associates, Inc. and the TCEQ use specially designed hanging hardware (nozzle, primary hose, breakaway & whip hose) to enable compatibility with ORVR vehicles. Ken Wilcox Associates, Inc. and the TCEQ have evaluated and approved the OPW 21GV nozzle with M34 vacuum assist hoses and breakaways in combination with Veeder-Root/VST hanging hardware as an acceptable system that can be used with the Gilbarco ORVR VaporVac and the Dresser Wayne ORVR WayneVac systems.

The following system components for VaporVac and WayneVac remain consistent with each manufacturer’s approved specifications.

1. Control electronics and power supply
2. Vapor pump/motor assembly
3. Solenoid vapor valve on dispensers manufactured before 7/31/02. No solenoid vapor valve on dispensers manufactured after 8/1/02. (Gilbarco VaporVac only)
4. Hose outlet casting.

The following system components are new or modified for ORVR VaporVac and ORVR WayneVac applications:

1. Gilbarco, Inc. VaporVac and Wayne WayneVac systems – No new or modified components

2. Veeder-Root/VST ORVR Hanging Hardware:
   - Nozzle
     - OPW 12VW ORVR nozzle (part number 12VW-0XTX)
     - Veeder-Root ORVR nozzle (part number 900300-XXX)
     - VST ORVR nozzle (part number VST-VR-NAcc)
   - Primary Hose with ORVR Valve
     - Veeder-Root ORVR primary hose assembly (part number 900301-XXX)
     - VST ORVR primary hose assembly (part number VST-ISE-XXX-SS)
   - Breakaway (Reconnectable and Non-Reconnectable)
     - OPW 66CAS ORVR (part number 66CAS-0XTX)
     - Veeder-Root vacuum assist safety breakaway (part number 900302-XXX)
     - VST vacuum assist safety breakaway (part number VST-ISA-SBK & VST-ISE-SBK)
   - Whip Hose (with or without flow limiter)
     - Veeder-Root vacuum assist whip hose (part number 900303-XXX)
     - VST vacuum assist whip hose (part number VST-ISE-XXX & VST-ISE-XXX-FLO)
3. OPW 21GV Nozzle with M34 Vacuum Assist Hoses & Breakaways:

- Nozzle with ORVR Valve
  - OPW 21GV ORVR nozzle (part number 21GV-0XXX)

- Primary Hose
  - Any primary hose listed in CARB Executive Order G-70-150-AE or G-70-153-AD

- Breakaway (Reconnectable and Non-Reconnectable)
  - Any breakaway listed in CARB Executive Order G-70-150-AE or G-70-153-AD

- Whip Hose (with or without flow limiter)
  - Any whip hose listed in CARB Executive Order G-70-150-AE or G-70-153-AD