### Modification Highlights for VR-201-N and VR-202-N

**EO Section** | **VR-202**
---|---
**Legal Language** | • Update headers and footers to reflect revision N  
• Paragraph will be inserted describing the nature of the amendment request from INCON to add the thermal printer  
• Paragraph will be inserted describing the nature of the amendment request from Veeder Root to add wireless vapor flow meters  
• Paragraph will be inserted describing the nature of the amendment request from Veeder Root to add new ISD software version 1.04  
• Change date from September 1, 2011 to September 1, 2015  
• Last paragraph, replace phrase:  
  VR-202-L issued on December 17, 2009  
  With:  
  VR-202-M issued on July 23, 2010  
• Last paragraph, delete following sentence:  
  “Healy Phase II EVR System Including ISD certified under VR-202-A through M may remain in use at existing installations; however, Veeder-Root ISD version 1.00 shall not remain in use after December 15, 2010,”  
• Change date in last sentence from July, 2010 to August, 2011  
<br />
**Exhibit 1** | • Update headers and footers to reflect revision N  
• Under Part II, Option I Veeder-Root Equipment, change ISD software version from 1.03 to the following language:
  **ISD Software**  
  Veeder-Root ISD 1.01, 1.02, 1.03 May Remain in Use at existing facilities  
  Veeder-Root ISD 1.04 is required for New Installations and Major Modifications  
• Under Part II, Option I - Veeder-Root Equipment, add wireless components after RS232 interface modules as follows:
  **RF Receiver-2**  
  (1 per GDF)  
  Veeder-Root 332440-029  
  (Figure 1A-29 and Figure 1A-30)  
  **RF Repeater-2**  
  (1 per GDF)  
  Veeder-Root 332440-030  
  (Figure 1A-29 and Figure 1A-30)  
  **RF Transmitter-2**  
  (1 per Dispenser)
EO Section | VR-202
--- | ---
Veeder-Root 332235-016  
(Figure 1A-29 and Figure 1A-30)

**RF Battery Pack**  
(1 per Transmitter)  
Veeder-Root 332425-011  
(Figure 1A-29 and Figure 1A-30)

**TLS RF Console-2**  
(1 per GDF)  
Veeder-Root 332242-002  
(Figure 1A-29 and Figure 1A-30)

- Add Figure 1A-29: Wireless Components for Veeder-Root ISD Vapor Flow Meter
- Add Figure 1A-30: TLS RF Wireless system site layout
- Under Part II, Option II – INCON Equipment List, the following language will be added:

**Thermal Printer Retrofit for TS-EMS and TS-550 with VRM Consoles**

A. Order Model Number TSSP-TMPTR;
B. ISD Software must be version 1.2.0 or higher; and
C. The Console Firmware must be 1.5.x.xxxx or higher.

**Exhibit 2**

- Update headers and footers to reflect revision N
- Page 5, under: **In-Station Diagnostic Systems**, the section will read as follows:

**Veeder-Root In-Station Diagnostics**

1. The gasoline dispensing facility operator/owner shall comply with local district requirements, if any, following a warning by the Veeder-Root In-Station Diagnostics (ISD) system and shut down individual dispensers or submersible pumps to all gasoline tanks by the ISD systems.

- Page 19 Under Part II Option 1, after the last paragraph of **TLS Console & ISD Software Version Number** add the following language and table:

The table below provides a list of expiration dates for each ISD software version.

**Veeder-Root ISD System Software Version Expiration Dates**
<table>
<thead>
<tr>
<th>Phase II EVR System Description</th>
<th>Software Version</th>
<th>Last Date Software May Remain In Use</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healy (Assist) VR-202 Series</td>
<td>Version 1.00</td>
<td>12/15/2010</td>
<td>Subject GDFs must upgrade to the certified software version (1.01 or later)</td>
</tr>
<tr>
<td></td>
<td>Version 1.01*</td>
<td>07/01/2012</td>
<td>Only applies to GDFs equipped with multi-product dispensers with fuel blending. Does not apply to GDFs equipped with uni-hose dispensers with fuel blending. Subject GDFs must upgrade to the certified software version (1.02 or later)</td>
</tr>
<tr>
<td></td>
<td>Version 1.02, 1.03</td>
<td>N/A</td>
<td>May Remain in Use at Existing Facilities</td>
</tr>
<tr>
<td></td>
<td>Version 1.04</td>
<td>N/A</td>
<td>Is Required for New Installations and Major Modifications</td>
</tr>
</tbody>
</table>

* Existing sites equipped with Veeder Root Software Version 1.01 may remain in use only if equipped with uni-hose or multi-product dispenser without fuel blending.

- Page 20, first paragraph, add a new sentence that states the following:

**Figure 2B-22** shows the wireless vapor flow meter components.

- Page 21, Under Training Program replace the second half of the last sentence:
<table>
<thead>
<tr>
<th>EO Section</th>
<th>VR-202</th>
</tr>
</thead>
<tbody>
<tr>
<td>press &quot;<strong>&quot; to get to the Veeder-Root menu and &quot;</strong>&quot; again to speak to a representative.</td>
<td></td>
</tr>
</tbody>
</table>

With the following language:

```
press "4" to get to the Veeder-Root menu and then "**" to speak to a representative or sign on to the Gilbarco Learning Suite at [http://wise.gilbarco.com](http://wise.gilbarco.com).
```

- Page 21, a new paragraph will be added as follows:

**RF Wireless Components**
The wireless system consists of the following devices (Figure 2B-22)

- a. RF Receiver-2
- b. RF Repeater-2
- c. RF Transmitter-2
- d. RF Battery Pack
- e. TLS RF Console-2 Box

These devices convert data in smart-sensor-protocol format to RF format and back to smart-sensor format for TLS such that TLS software assumes it is directly connected to the sensor. The transmitter automatically identifies the Flow Meter connected to it and polls it periodically. The collected data is converted to radio format and transmitted through air to receiver. The receiver collects the radio packet and within 200ms sends the data to the TLS RF on RS485 bus. The TLS RF provides this data to TLS on next poll by TLS. To prevent adjacent GDF with wireless equipment from interfering with each others transmissions, dip switches on the Transmitter and Receiver are used to configure a site ID. The Repeater is not required, but may be installed as needed to provide a second path for the wireless signal traveling from Transmitter to Receiver.

- Page 22, changed software version to 01.XX on the daily report printout
- Add new Figure 2B-22 for wireless components
- Add new Figure 2B-23 for wireless components
- Page 29 Under Part II Option II, after the last paragraph of **Console & VRM Software Version Number** add the following language and table:

The table below provides a list of expiration dates for each ISD software version.
## INCON ISD System Software Version Expiration Dates

<table>
<thead>
<tr>
<th>Phase II EVR System Description</th>
<th>Software Version</th>
<th>Last Date Software May Remain In Use</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healy (Assist) VR-202 Series</td>
<td>Version 1.0.0 and 1.1.0 for Multi-Product (six pack) Dispensers</td>
<td>01/01/2014</td>
<td>Does not apply to GDFs equipped with unihose dispensers. Subject GDFs must upgrade to the certified software version (1.2.0 or later)</td>
</tr>
<tr>
<td></td>
<td>Version 1.2.0 for Multi-Product (six pack) Dispensers</td>
<td>N/A</td>
<td>May Remain in Use at Existing Facilities</td>
</tr>
</tbody>
</table>

- Page 32, under Training Program, replace existing web link with the following link:

http://techlab.franklinfueling.com/mod/resources/view.php?id=64

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### Exhibit 3

- Update headers and footers to reflect revision N
- Page 6, add bullet seven that reads:

7. **VEEDER-ROOT RF WIRELESS COMPONENTS**
   a. Wireless communication is tested between transmitter and receiver.
   
b. Communication is tested between receiver and RF box over communication wire.
   
c. Communication is tested between transmitter and sensor over communication wire.
   
d. Transmitter and receiver board addressing capability is
EO Section

| Exhibit 6 | Update headers and footers to reflect revision N  
|           | Add new Veeder-Root warranty language to page 3, replacing original language which includes RF Wireless and battery language. |
| Exhibit 9 | Update headers and footers to reflect revision N  
|           | Add new language and figure to Exhibit 9 to accommodate the following Vapor Pressure Sensor installation: If the Vapor Pressure Sensor is installed on the vent stack, the pressure of the UST’s is determined at the vent stack test port as shown in Figure 9-5. The vent stack test port is equipped with a quick connect fitting that is connected to an electronic pressure measuring device or digital manometer. This test can be performed while product is being dispensed into motor vehicles.  
| Exhibit 5,7,8,10 and 11 | Update headers and footers to reflect revision N |

| IOM Section | Update headers and footers to reflect revision N  
| IOM 1 | Update Table of Contents to include the following new documents:  
|       | IOM28: TLS RF Wireless 2 Systems (W2) Installation and Maintenance Guide  
|       | IOM29: FFS Thermal Printer Model TSSP-TMPTTR Retrofit/Installation Instructions  
| IOM2 – IOM19 | Update headers and footers to reflect revision N  
| IOM20 | Page ii, added language regarding FCC information  
|       | Page iii, added modified warranty language including new section on wireless battery pack  
|       | Page 1-2, added new contractor certification requirements and reference to new manual for wireless components  
|       | Page 1-3, added new section in Table 1-2. Reworded Warning Section  
|       | Page 2-1, added minor word changes  
<p>|       | Table 5-2, added battery warning language |</p>
<table>
<thead>
<tr>
<th>IOM Section</th>
<th>VR-202</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Table 5-3, added new table for wireless related sensor alarms&lt;br&gt;• Page 5-8, changed ISD software version 1.03 to X.XX&lt;br&gt;• Page 5-9, changed ISD software version 1.03 to X.XX&lt;br&gt;• Page 5-10, changed ISD software version 1.03 to X.XX&lt;br&gt;• Page 5-16, changed ISD software version 1.03 to X.XX&lt;br&gt;• Page 5-17, changed ISD software version 1.03 to X.XX&lt;br&gt;• Page 5-18, changed ISD software version 1.03 to X.XX</td>
</tr>
<tr>
<td>IOM21</td>
<td>• Added revised language in the “Notice” section&lt;br&gt;• Page 1, added wireless contractor certification requirements and reference to wireless installation manual&lt;br&gt;• Page 2, minor word changes for wireless&lt;br&gt;• Page 4, minor word changes for wireless&lt;br&gt;• Page 6, language added to step 11 regarding wireless&lt;br&gt;• Page 8, language added to figure 4 for wireless&lt;br&gt;• Page 9, language added to sentence 3 for wireless&lt;br&gt;• Page 10, language added to figure 6 for wireless</td>
</tr>
<tr>
<td>IOM22 – IOM27</td>
<td>• Update headers and footers to reflect revision N</td>
</tr>
<tr>
<td>IOM23</td>
<td>• Update Appendix A: Alarm codes to add thermal printer</td>
</tr>
<tr>
<td>IOM28</td>
<td>• New IOM: TLS RF Wireless 2 Systems (W2) Installation and Maintenance Guide</td>
</tr>
<tr>
<td>IOM29</td>
<td>• New IOM: FFS Thermal Printer Model TSSP-TMPTR Retrofit/Installation Instructions</td>
</tr>
</tbody>
</table>