U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste. 600
Atlanta, GA 30303

WARNING LETTER

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 4, 2014

Mr. Stephen Wambold
Chief Executive Officer and President
Ferrellgas
7500 College Boulevard, Suite 1000
Overland Park, Kansas 66210

CPF 2-2014-0016W

Dear Mr. Wambold:

On January 27-30, May 5, and May 28, 2014, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Southern Region, Office of Pipeline Safety (OPS) inspected the Ferrellgas liquefied petroleum gas (LPG) pipeline system records in Jupiter and Tampa, Florida and pipeline facilities located in Martin and Osceola counties, Florida, pursuant to Chapter 601 of 49 United States Code.

As a result of the inspection, it appears that Ferrellgas has committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violations are:

1. **§ 192.11 Petroleum gas systems.**
   ... (b) Each pipeline system subject to this part that transports only petroleum gas or petroleum gas/air mixtures must meet the requirements of this part and of ANSI/NFPA 58 and 59.

   – Ferrellgas did not meet the requirements for "*Pipe for Regulator Venting*" in NFPA 58 (2004), Section 5.7.5.1 which states that *"Pipe or tubing used to vent regulators shall be one of the following: (1) Metal pipe and tubing in accordance with 5.8.3, (2) PVC meeting the requirements of UL 651, Schedule 40 or 80 Rigid PVC Conduit."*

   The PHMSA inspectors observed white PVC water pipe, which did not meet the requirements of Section 5.7.5.1, used to vent regulators at:
   - 3169 SW Cordoba Street in The Villas
   - 5801 SE Forest Glade Trail in The Arbors

- Ferrellgas did not meet the requirements for "*Regulator Installation*" in NFPA 58 (2004), Section 6.7.4.5, which states that "*[t]he point of discharge from the required pressure relief device on regulating equipment installed outside of buildings in fixed piping systems shall be located not less than 3 ft. (1 m) horizontally away from any building opening below the level of such discharge, and not beneath any building unless this space is well ventilated to the outside and is not enclosed for more than 50 percent of its perimeter.*"

  The PHMSA inspectors observed a pressure relief device with its point of discharge less than 3 feet from the building opening, which was below the point of discharge, at 3076 SE Island Point Ln in Sailfish Point.

- Ferrellgas did not meet the requirements for "*Regulator Installation*" in NFPA 58 (2004), Section 6.7.4.6, which states that "*The point of discharge [of a regulator] shall also be located not less than 5 ft. (1.5 m) in any direction away from any source of ignition, openings into direct-vent (sealed combustion system) appliances, or mechanical ventilation air intakes.*"

  The PHMSA inspectors observed pressure relief devices with points of discharge less than 5 feet from sources of ignition at:
  - 5045 Sea Holly Way in Orchid Bay
  - 2266 SW Estella Terrace in 141The Villas
  - 3169 SW Cordoba Street in The Villas
  - 3020 SW Captiva Court in Islesworth

2. **§192.195 Protection against accidental overpressuring.**
   ... (b) *Additional requirements for distribution systems*. Each distribution system that is supplied from a source of gas that is at a higher pressure than the maximum allowable operating pressure for the system must—
   (1) Have pressure regulation devices capable of meeting the pressure, load, and other service conditions that will be experienced in normal operation of the system, and that could be activated in the event of failure of some portion of the system; and
   (2) Be designed so as to prevent accidental overpressuring.

   Ferrellgas did not protect its Sailfish Point system from accidental overpressuring that could have occurred due to failure of some portion of the system. Ferrellgas installed a single regulator at its Sailfish Point regulating station, but did not provide a method to prevent accidental overpressure in the event that its primary pressure regulator failed.

3. **§ 192.481 Atmospheric corrosion control: Monitoring.**
(a) Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

If the pipeline is located:	Then the frequency of inspection is:
Onshore	At least once every 3 calendar years, but with intervals not exceeding 39 months
Offshore	At least once each calendar year, but with intervals not exceeding 15 months

Ferrellgas did not inspect each onshore pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion once every 3 calendar years, but with intervals not exceeding 39 months. Ferrellgas records showed that it conducted atmospheric corrosion control monitoring at The Arbors, an onshore pipeline system, on 07/17/2008. The next monitoring was due by 10/17/2011 but did not occur until 02/14/2013, thus the inspection interval exceeded the 39 months between inspections specified in the regulation.

4. **§ 192.605 Procedural manual for operations, maintenance, and emergencies.**
... (b) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations.
... (8) Periodically reviewing the work done by operator personnel to determine the effectiveness, and adequacy of the procedures used in normal operation and maintenance and modifying the procedures when deficiencies are found.

Ferrellgas did not periodically review the work done by its personnel to determine the effectiveness and adequacy of the procedures used in normal operation and maintenance and to modify the procedure when deficiencies were found. That is, Ferrellgas did not provide documentation demonstrating that it periodically reviewed the work done by its personnel or that it modified its procedures when deficiencies were found, as required by the regulation.

5. **§ 192.625 Odorization of gas.**
... (f) To assure the proper concentration of odorant in accordance with this section, each operator must conduct periodic sampling of combustible gases using an instrument capable of determining the percentage of gas in air at which the odor becomes readily detectable. Operators of master meter systems may comply with this requirement by
(1) Receiving written verification from their gas source that the gas has the proper concentration of odorant; and
(2) Conducting periodic "sniff" tests at the extremities of the system to confirm that the gas contains odorant.

Ferrellgas did not assure the proper concentration of odorant by conducting periodic sampling of combustible gases using an instrument[1] capable of determining the percentage of gas in air at which the odor becomes readily detectable. Ferrellgas did not have records of performing these required instrumented checks for calendar years 2010 – 2013 at The Arbors, Buenaventura Lakes, Islesworth, Orchid Bay, Sailfish Point, and The Villas.

6. **§ 192.707 Line markers for mains and transmission lines.**
(a) Buried pipelines. Except as provided in paragraph (b) of this section, a line marker must be placed and maintained as close as practical over each buried main and transmission line:
(1) At each crossing of a public road and railroad; and
(2) Wherever necessary to identify the location of the transmission line or main to reduce the possibility of damage or interference.

   Ferrellgas did not place and maintain line markers as close as practical over each buried main at each crossing of a public road. During the field inspection, the OPS inspector identified several locations without line markers where mains crossed public roads at The Arbors, Islesworth, Orchid Bay, Sailfish Point, and The Villas.

7. **§ 192.707 Line markers for mains and transmission lines.**
... (d) Marker warning. The following must be written legibly on a background of sharply contrasting color on each line marker:
... (2) The name of the operator and telephone number (including area code) where the operator can be reached at all times.

   The line marker that Ferrellgas placed at the Treasure Coast meter bank did not display a telephone number where the operator could be reached at all times.

8. **§ 192.723 Distribution systems: Leakage surveys.**
... (b) The type and scope of the leakage control program must be determined by the nature of the operations and the local conditions, but it must meet the following minimum requirements:
... (2) A leakage survey with leak detector equipment must be conducted outside business districts as frequently as necessary, but at least once every 5 calendar years at intervals not exceeding 63 months. However, for cathodically unprotected distribution lines subject to §192.465(e) on which electrical surveys for corrosion are impractical, a leakage survey must be conducted at least once every 3 calendar years at intervals not exceeding 39 months.

   Ferrellgas did not conduct leakage surveys outside business districts at least once every 5 calendar years at intervals not exceeding 63 months. Ferrellgas records showed that it had conducted leak surveys at:

[1] Since Ferrellgas was not operating a master meter system, the only acceptable method of complying was to use an instrument capable of determining the percentage of gas in air at which the odor becomes readily detectable.

- The Arbors on 07/10-15/2008 and 07/02/2013. While this was within the 5 year intervals and did not exceed 63 months, the 2013 leak survey was only performed at the tanks and not on mains and services in the system.
- Islesworth on 06/04/2008 and 07/09/2013. While this was within the 5 year intervals and did not exceed 63 months, the 2013 leak survey was only performed at the tanks and not on mains and services in the system.
- Orchid Bay on 06/04/2008 and 10/13/2013. This interval exceeded 63 months. Additionally, the 2013 leak survey was only performed at the tanks and not on mains and services in the system.
- Sailfish Point on 05/20-21/2008 and 10/31/2013. This interval exceeded 63 months. Additionally, the 2013 leak survey was only performed at the tanks and not on mains and services in the system.
- The Villas on 05/26/2008 and 05/09/2013. While this was within the 5 year intervals and did not exceed 63 months, the 2013 leak survey was only performed at the tanks and not on mains and services in the system.

9. **§ 192.739 Pressure limiting and regulating stations: Inspection and testing.**
(a) Each pressure limiting station, relief device (except rupture discs), and pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months, but at least once each calendar year, to inspections and tests to determine that it is—
(1) In good mechanical condition;
(2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;
(3) Except as provided in paragraph (b) of this section, set to control or relieve at the correct pressure consistent with the pressure limits of §192.201(a); and
(4) Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.

   Ferrellgas did not inspect and test its pressure limiting and regulating stations at intervals not exceeding 15 months, but at least once each calendar year. Ferrellgas records for The Arbors listed 6 pressure regulators and showed inspections as follows:
   - No pressure regulators in 2010.
   - All 6 pressure regulators between 11/04/2011 and 11/08/2011.
   - Only 5 pressure regulators on 11/17/2012 (missing a monitor regulator at the front tanks)
   - Only 5 pressure regulators on 11/25/2013 (missing a monitor regulator at the front tanks)

10. **§ 192.741 Pressure limiting and regulating stations: Telemetering or recording gauges.**
(a) Each distribution system supplied by more than one district pressure regulating

station must be equipped with telemetering or recording pressure gauges to indicate the gas pressure in the district.

Ferrellgas did not place telemetering or recording pressure gauges in its distribution systems served by more than one pressure regulating station. Ferrellgas fed The Arbors, Islesworth, and Orchid Bay systems from two separate regulator stations, however, Ferrellgas did not supply telemetering or recording pressure gauges to indicate the gas pressure in the district.

11. **§ 192.747 Valve maintenance: Distribution systems.**
(a) Each valve, the use of which may be necessary for the safe operation of a distribution system, must be checked and serviced at intervals not exceeding 15 months, but at least once each calendar year.

Ferrellgas did not check and service each valve which may be necessary for the safe operation of its pipeline distribution system at intervals not exceeding 15 months, but at least once each calendar year.

Ferrellgas records demonstrated that valve inspections were performed as follows:

- The Arbors: missed 1 key valve at regulating station on 01/17/2013. The valve was inspected on 01/23/2012 and 01/17/2014 .
- Islesworth: missed 2 key valves, 1 at each regulating station, at inspections performed on 05/27/2010, 05/05/2011, 05/06/2012, and 05/07/2013.
- The Villas: missed 1 key valve at the regulating station in 2011. The valve was inspected on 10/14/2010 and 10/18/2012 .

12. **§ 192.1007 What are the required elements of an integrity management plan?**
... (b) *Identify threats.* The operator must consider the following categories of threats to each gas distribution pipeline: corrosion, natural forces, excavation damage, other outside force damage, material or welds, equipment failure, incorrect operations, and other concerns that could threaten the integrity of its pipeline. An operator must consider reasonably available information to identify existing and potential threats. Sources of data may include, but are not limited to, incident and leak history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, and excavation damage experience.

Ferrellgas did not consider reasonably available information to identify existing and potential threats. The Ferrellgas written Distribution Integrity Management Program (DIMP) plans for Arbors, Islesworth, and Orchid Bay was generated by the *Simple Handy Rule Based Integrity Management Plan (SHRIMP)* tool, which failed to identify existing and potential threats as follows:

- Section 4.2.1. Corrosion, *External Corrosion On Other Metal*, states that "*other metal is not present.*" While the system had plastic mains and services, the LP supply source was a buried metal tank that should have been considered in the threat assessment.
- Section 4.2.1. Corrosion, *Internal Corrosion*, states that *"neither metal mains and services nor plastic mains and services with metal fittings are present."* While the

system had plastic mains and services, the LP supply source, a metal tank, metal fittings, and a copper pigtail should have been considered in the threat assessment.

13. § 192.1015 What must a master meter or small liquefied petroleum gas (LPG) operator do to implement this subpart?
... (b) *Elements.* A written integrity management plan must address, at a minimum, the following elements:
... (2)*Identify threats.* The operator must consider, at minimum, the following categories of threats (existing and potential): Corrosion, natural forces, excavation damage, other outside force damage, material or weld failure, equipment failure, and incorrect operation.

Ferrellgas did not consider reasonably available information to identify existing and potential threats. The Ferrellgas written DIMP plans for Buenaventura Lakes, Sailfish Point, and The Villas (generated by the *SHRIMP* tool), failed to identify existing and potential threats as follows:

- In the written DIMP plan for Buenaventura Lakes:
  - Section 4.2.1. Corrosion, *Atmospheric Corrosion On the Entire System*, states that *"Buenaventura Lakes Shopping Centre does not have facilities that require atmospheric corrosion inspections."* In fact, Buenaventura Lakes had aboveground piping that required atmospheric corrosion inspections and should have been considered in the threat assessment.
  - Section 4.2.1. Corrosion, *External Corrosion On Other Metal*, states that *"other metal is not present."* While the system had plastic mains and services, the LP supply source, a buried metal tank, should have been considered in the threat assessment.
- In the written DIMP plan for Sailfish Point:
  - Section 4.2.1. Corrosion, *External Corrosion On Other Metal*, states that *"other* metal *is not present."* While the system had plastic mains and services, the LP supply source, a buried metal tank, should have been considered in the threat assessment.
  - Section 4.2.1. Corrosion, *Internal Corrosion*, states that *"neither metal mains and services nor plastic mains and services with metal fittings are present."* While the system had plastic mains and services, the LP supply source, a metal tank, metal fittings and a copper pigtail should have been considered in the threat assessment.
  - Section 4.2.3. Excavation Damage, *Excavation Damage Due To Third Party Damages*, states that *"[e]xcavation damages have not occurred due to third parties during the past few years."* In fact, there was third party excavation damage to the Sailfish Point System in 2012 that should have been considered in the threat assessment.
- In the written DIMP plan for The Villas:
  - Section 4.2.1. Corrosion, *External Corrosion On Other Metal*, states that *"other metal is not present."* While the system had plastic mains and services, the LP

supply source, a buried metal tank, should have been considered in the threat assessment.

14. § 192.1015 What must a master meter or small liquefied petroleum gas (LPG) operator do to implement this subpart?

... (b) *Elements.* A written integrity management plan must address, at a minimum, the following elements:

... (6) *Periodic evaluation and improvement.* The operator must determine the appropriate period for conducting IM program evaluations based on the complexity of its pipeline and changes in factors affecting the risk of failure. An operator must re-evaluate its entire program at least every five years. The operator must consider the results of the performance monitoring in these evaluations.

Ferrellgas did not periodically evaluate and improve its DIMP plan for Buenaventura Lakes. In its written DIMP plan for Buenaventura Lakes, Chapter 8 Periodic Evaluation and Improvement, states that "*Buenaventura Lakes Shopping Center will conduct a complete re-evaluation of this Plan no less than every 1 year.*" The plan that Ferrellgas provided was dated 08/02/2011 and there were no plans or documentation showing the plan was re-evaluated in 2012 or 2013.

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed $200,000 per violation per day the violation persists up to a maximum of $2,000,000 for a related series of violations. For violations occurring prior to January 4, 2012, the maximum penalty may not exceed $100,000 per violation per day, with a maximum penalty not to exceed $1,000,000 for a related series of violations. We have reviewed the circumstances and supporting documents involved in this case, and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to correct the item(s) identified in this letter. Failure to do so will result in Ferrellgas being subject to additional enforcement action.

No reply to this letter is required. If you choose to reply, in your correspondence please refer to **CPF 2-2014-0016W**. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

Sincerely,

Wayne T. Lemoi
Director, Office of Pipeline Safety
PHMSA Southern Region