



## LP Gas Program Appendix B

### Inspection Guidelines

#### 1. PURPOSE & SCOPE

To establish inspections for ensuring facilities are maintained for safe storage and handling of Liquid Propane Gas.

#### 2. SCOPE

The inspection shall cover owned and vendor supplied LPG storage containers, systems and piping located at Mosaic Fertilizer's New Wales, Four Corners, Hopewell, Big Bend, and South Pierce facilities.

#### 3. DEFINITIONS

3.1 None.

#### 4. PROCEDURE

##### 4.1 Storage Container Inspection

4.1.1 Verify all above ground containers are located a minimum distance from all buildings based on capacity as follows:

- a. less than 125 Gallons - none;
- b. 125 to 500 gallons - 10 feet;
- c. 501 to 2000 Gallons - 25 feet; and
- d. 2001 to 30,000 Gallons - 50 feet.

4.1.2 Verify all containers are located 10 feet from any public road or highway and 5 feet from any driveway or interior plant road.

4.1.3 Verify all containers are adequately barricaded for protection from vehicular and equipment traffic.

4.1.4 Verify containers are properly supported and secured to prevent movement or damage from high winds.

4.1.5 Verify all containers are designed for storage of LPG and either have an ASME legible name tag or are stamped with the appropriate DOT markings. The common DOT markings for LPG are 4B-240, 4BA-240, 4B-300, 4BW-240 and 4E-240. ASME name tags shall include:

- a. Service for which container is designed (LPG, above ground);
- b. Name and address of supplier;
- c. Water capacity in US pounds or gallons;
- d. Design pressure PSI;
- e. The wording " this container shall not contain a product with a vapor pressure in excess of \_\_\_\_\_ psi at 100 F;
- f. Outside surface area in square feet;
- g. Year of manufacture;
- h. Shell thickness and head thickness;
- i. Overall length;
- j. Outside diameter;



- k. Head diameter;
- l. Manufacturers serial number;
- m. Date fabricated; and
- n. ASME Code Symbol.
- 4.1.6 Verify DOT containers have been requalified as required by DOT Regulations - 12 years after the date manufactured and then every 5 years if last date is followed by "E" or every 7 if last date is followed by "S".
- 4.1.7 Inspect all containers for distortion, denting, bulging, gouging, corrosion or other damage which may affect the integrity of the container. Containers showing signs of the above are to be evaluated for continued service by a qualified engineer.
- 4.1.8 Verify liquid level gage is legible and is working.
- 4.1.9 Inspect the manual block valve(s) for signs of damage or corrosion.
- 4.1.10 Inspect the safety valve(s) for signs of damage or corrosion. Verify rain caps are installed as required.
- 4.1.11 Inspect the gas regulator for signs of damage or corrosion.
- 4.1.12 Check the container and associated piping for odors which would indicate gas leakage.
- 4.1.13 Verify all containers are marked "Flammable" and either "LP-Gas", "LP-GAS" or "Propane". Signs must be clean and legible from all directions.
- 4.1.14 Verify "DANGER - No Smoking or Open Flames" signs are posted by the containers
- 4.1.15 Verify fire extinguishers are located in the area and are readily accessible.
- 4.1.16 Inspect condition of paint to prevent exterior corrosion from occurring.
- 4.2 LPG Piping Inspection
  - 4.2.1 Inspect LPG pipe for corrosion, damage, and signs of leakage. Check for missing or damage pipe supports
  - 4.2.2 Verify pipe is properly identified and/or color-coded.
- 4.3 Transfer station and Portable Container Inspection
  - 4.3.1 Verify all containers are marked with a unique Mosaic Phosphates equipment number. Recently exchanged containers will be given a new number.
  - 4.3.2 Verify all portable cylinders not in use are fitted with a protective cap on the filler valve and that the filler valve is closed.
  - 4.3.3 Verify all cylinders not in use are stored in an open ventilated area isolated from vehicular traffic and ignition sources.
  - 4.3.4 Verify all hoses and equipment attached to portable cylinders are designed for LPG service and in good condition.
  - 4.3.5 Verify all mounted cylinders are securely fastened to prevent jarring loose and slipping or rotating.

## 5. TRAINING

- 5.1 The initial inspection is to be performed by an Mosaic Phosphates Engineer experienced in the design and inspection of tanks and pressure vessels. Annual inspections after the initial inspection are to be completed by qualified company personnel or by inspectors certified for installation and inspection of LP Gas systems by the State of Florida.

## 6. DOCUMENTATION

- 6.1 Copies of the completed inspections and summary are to be filed and kept by the Area Maintenance Department for all LPG Storage Containers located within the area boundaries. Maintenance shall maintain records for completion of any repairs required by the inspection.



- 6.2 The completed original inspection forms and summary sheet are to be filed in the Facility Area Maintenance files.
- 6.3 The original DOT requalification documentation is to be filed in the Facility Area Maintenance files. All deficiencies shall be noted on a Safety Work Order and submitted to Maintenance.

7. ROUTING

- 7.1 A copy of the inspection forms and facility summary sheet are to be routed to the Facility Area Maintenance Supt., Maintenance Manager, Area Production Supt., and Safety Manager.

8. APPENDICES

- 8.1 Appendix A - LP Gas Program Inspection Form

9. REVISION LOG

Revision Log				
Rev.No.	Requested By	Approved By	Revised By	Rev.Date
0	Initial Issue	Safety Advisory Panel	Task Team	7/8/99
1	Original Task Team recommendation - remove gas filling section.	Safety Advisory Panel	J. Heaser	8/14/01
2	Logo Change	Safety and Health	J. Marshall	11/21/06
3	Minor revisions to standardize format; deleted summary inventory sheet	D. Allen	D. Allen	5/14/07
	Reformat for ISO		D. Allen	7/7/2011
Contact Subject Matter Expert for additional information on this inspection guide.				