

Owner: WEJCF, LLC
Applicant: Anderson Propane Service, Inc.
Date: April 19, 2017
Property: 3200 Beulah Salisbury Drive; Spotsylvania County Tax Parcel 25-A-8R;
Consisting of 1.29 Acres | Spotsylvania Industrial Park

Safety Plan & Information

Anderson Propane Service, Inc. (herein referred to as “Anderson Propane”) maintains a proactive safety attitude and operates under guidelines which protect employees, contractors and the general public from injury, illness and property loss. This Safety Plan addresses the following LPG bulk plant facility safety-related items:

1. Full compliance with state and federal requirements.
2. Effectiveness and safety of product control measures.
3. Physical protection measures.
4. Effectiveness of the local fire departments that may respond to an emergency within the facility and requirements for availability of adequate water supply.

State and Federal Requirements

The proposed propane storage tank bulk facility will be constructed, operated and maintained according to the requirements of the National Fire Protection Association (NFPA) 58 Liquefied Petroleum Gas Code as referenced in the Virginia Statewide Fire Prevention Code.

Effectiveness and Safety of Product Control Measures

The NFPA 58 code requirements for product control appurtenances on bulk tanks, herein referred to as “containers,” used in bulk plants are more stringent than for residential and commercial use containers. The facility will be constructed according to all applicable safety regulations and with the following product control measures:

- Location of transfer operations and separation from exposures will be located per NFPA 58.
- Containers will be mounted on noncombustible saddles.
- Containers will be equipped with pressure relief valves which are a type of pressure relief designed to open and then close to prevent excess internal fluid pressure in a container without releasing the entire contents of the container. The pressure relief valves will be installed so that the relief device is in direct communication with the vapor space of the container.
- Containers will be equipped with primary shutoff valves, called an internal valve, whose seat and seat disc remain inside the container so that damage to parts exterior to the container or mating flange does not prevent effective sealing of the valve and which has the following features: (1) provision of the addition of a means of remote closure; and (2) automatic shutoff when the flow through the valve exceeds its rated maximum flow capacity or when pump actuation differential pressure drops to a predetermined point.

- Containers will be equipped with emergency shut off valves which are shutoff valves incorporating thermal and manual means of closing the valves and that also provides for a remote means of closing to be attached.
- All piping connections will be threaded, welded or brazed.
- Remote tank monitors will be installed which will send redundant sudden product loss alerts to key Anderson Propane employees.
- Containers will be equipped with positive shut off valve which is a manually operated shutoff valve used to control the flow of propane.
- Containers will be equipped with back flow check valves which allows flow in one direction only and is used to allow a container to be filled while preventing product from flowing out of the container.
- Containers will be equipped with excess flow valves which is designed to close when the liquid or vapor passing through it exceeds a prescribed flow rate.
- Containers will be equipped with hydrostatic pressure relief valves which are set to open and relieve pressure in a liquid hose or pipe segment between two shutoff valves when the pressure exceeds the setting of the valve.

Physical Protection Measures

The proposed gas facility will be protected against tampering and from accidental collision of vehicles with containers and transfer lines per requirements by NFPA 58 and specified by the following:

- Lighting will be provided for nighttime operations to illuminate storage containers, control valves and other equipment.
- Concrete jersey barrier walls will be installed as protection against vehicular impacts on containers, transfer piping and other appurtenances.
- Protection against corrosion where piping is in contact with supports or corrosion causing substances will be provided.
- The proposed facility will be protected by chain link fencing.
- All vegetation and combustible materials are located more than 10 feet from each container.
- Tanks containing flammable liquids with a flash point less than 200°F (ex., gasoline, diesel) are located more than 20 feet from the containers.
- Electrical equipment and wiring installed shall be in accordance with NFPA 70, the National Electrical Code.
- Open flames, cutting or welding tools, portable electrical tools, and extension lights capable of igniting LP-gas shall not be installed or used within classified areas.
- An approved, portable, dry chemical fire extinguisher of minimum capacity of 18 Lbs. and having a B:C rating will be located on the proposed facility.
- A “No Smoking” policy will be strictly enforced and “No Smoking” signs will be displayed.
- The proposed facility will be surveilled by a closed circuit camera system.

Fire Services and Water Supply Requirements

Anderson Propane will continue to foster the established working relationship with Spotsylvania Fire Department as their support is paramount to the safety of the proposed facility in the event of an incident. A Fire Safety Analysis will be completed and submitted prior to the operation of the proposed facility. The following information addresses fire services and water supply requirements:

- The proposed facility is located approximately 5.8 miles from Spotsylvania Fire Company/Rescue Station 11 located on 9517 Crossroad Parkway.
- The proposed facility is located approximately 1.7 miles from the nearest City of Fredericksburg Fire Station located on 601 Princess Anne Street.
- The perimeter chain link fence which can be cut and accessed by the fire department.
- The property can be accessed by two gates which can also be cut, in case of emergency, by the fire department.
- There are three hydrants within 400 feet of the proposed facility.
- The proposed facility will include either two 60,000 gallon or four 30,000 gallon LPG containers which will require a fire flow rate of 1,200 gpm. The fire hydrant located on Beulah Salisbury Drive in front of the Quarles Petroleum Facility, located approximately 370 feet from the site, was hydrostatically tested and will provide the required fire flow. The additional two fire hydrants are located within 200 feet of the site and will provide more than the required fire flow.