Subject: RESPONSE TO LPG CARRIER AND CONTAINER

EMERGENCIES

Section: PPG# 4400.21

Chapter: Operations

Effective Date: 7/1/98

1.0 POLICY

1.1 The Incident Commander at any incident involving LPG Storage tanks shall observe for early warning signs of a Boiling Liquid Expanding Vapor Explosion (B.L.E.V.E.). Any such signs shall be adequate reason not to attack this type of fire:

- (a) Bulges in the tanks or containers
- (b) Heat or direct f lame impingement on the upper area of the container or tank for 20 minutes or more.
- (c) Loud whistling noise created by the gas escaping from the relief valve under extreme pressure.
- (d) Undetermined time of exposure to the fire.

2.0 GUIDELINES

- 2.1 If in the judgment of the Incident Commander, an attack is warranted, the tactics should be:
 - (a) Approach uphill with tank below, upwind with wind to back, and from sides of tank (ends are weakest part). Do not drive apparatus through vapor area.
 - **(b)** Evacuate the area of firefighters not being used for fire fighting and bystanders.
 - (c) Ensure a continuous water supply with a minimum capacity of 500 gpm.
 - (d) Cool the tanks using straight streams from as far away as possible to coal the upper part of the tank. Wait for the relief valve to close before approaching closer. Use more than one line if possible.
 - (e) Control leaks by shutting off valves and/or pumps to stop the flow of gas, if possible. Use fog lines to disburse the vapors and keep away from ignition sources.
 - **(f)** Protect exposures from vapor path, heat radiation, and B.L.E.V.E.
 - (g) Extinguish this type of fire only by shutting off supply of gas. Do not attempt to extinguish the fire with hose streams, dry chemical, etc. Shut off valves and/or pumps to stop the flow of gas to extinguish the fire. Use unmanned lines and monitors to control fires, which cannot be

extinguished by shutting off the supply of gas, and allow to burn out. Evacuate all unnecessary department staff from the area as soon as possible to eliminate the life hazard.