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North Carolina Department of Agriculture
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Standards Division

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TO: Suppliers and Operators of Stationary Propane Tanks
FROM: Richard Fredenburg, LP-Gas Engineer
SUBJECT: Relief Valves and Covers over Propane Tanks

If you do not have a propane tank with an enclosure around or a cover over it, then please disregard this information as it does not apply to your location.

RELIEF VALVE DISCHARGE REQUIREMENT & RECOMMENDED GUIDELINES FOR COVERS

With the severe risks associated with a relief valve's discharge being trapped under a cover or a broken pipe's release being trapped by an enclosure surrounding a tank, we would like to clarify these requirements and our enforcement of them.

Relief Valve Discharge Requirements are defined in section 6.7.2.3 of the *LP-Gas Code*. Below are some guidelines with regards to covers. A "cover" is any device or structure over a tank such as a roof, a canopy, a tent, a building, etc. Covers may be permitted over the cabinet and employee/customer area of a dispenser, providing the arrangement does not prevent the fire department from putting water on the tank (please consult your local fire official on this).

For your convenience, we have attached the enclosure requests and requirements.

(1) Relief valves:

The relief valve discharge must not be obstructed by a cover as it may redirect the discharge back down onto or around the tank. **Relief valves under a cover will not be allowed for any reason unless it is piped through the cover.**

(2) Piping the discharge through the cover:

If the relief valve discharge opening has threads for a stack or coupling, then piping may be added in order to pass through the cover. It must comply with section 6.7.2.14 of the *LP-Gas Code*. **No discharge piping is allowed for relief valves unless it has threading for that purpose.**

(3) Openings in the cover:

At this time, our policy must be that a cover cannot be located over any part of a tank, unless it has been requested and approved by our office. We have made an effort to collect information from relief valve manufacturers, but we have not received any information to justify an opening, of any size, directly above a relief valve. However, we will consider any such information provided as part of a fire protection analysis and a cover request.

(4) Cover and enclosure requests:

Operators can make a request for a cover or an enclosure and each location will be allowed on a case by case basis and a “sound fire protection analysis”. Specific approval for an enclosure over or around a tank is to be requested prior to installation of the enclosure, as operation of the tank is a violation without the approval

See the “Fire Protection Analysis Considerations” document attached. While the format is only a suggestion, the information to be included in the analysis is the minimum we will need to consider approving the request.

(5) Removal of covers:

Another option is to remove the cover over the tank and keep it over the dispenser cabinet and work area. Or, keep the cover in place and move the dispensing unit out from under it. This will allow the covered area to be used for other purposes.

We are planning to resume enforcement of this requirement on July 1, 2015. While locations will only receive a warning letter on their first violation after this date, we hope that providing this information will allow you to plan your response accordingly. As with any violation, a request for an extension of time to make corrections may be made to our office. Please call if you would like us to review a specific location or have any questions.