This policy is meant to provide general guidance on Denver Fire Department requirements where elevator hydraulic tanks are proposed for installation in a hoistway. Application is subject to the discretion of the Fire Code Official. Questions can be addressed by contacting the Fire Prevention Division between 7:00 a.m. and 4:00 p.m. Monday thru Friday at 720-913-3474. Walk-in hours are 7:00 a.m. to 9:30 a.m. ONLY, Monday - Friday, at 745 W. Colfax Ave.

THIS POLICY IS RETROACTIVE

I. SCOPE

This policy applies to the required venting of elevator hydraulic tanks placed in the elevator hoistway.

Existing Hydraulic Tank Located in Hoistway

All existing Hydraulic MRL elevators shall be retro-fit within 90 days from the effective date of this policy.

II. GENERAL

In accordance with ASME A17.1, 3.24.3.1, “Tanks shall be covered and suitably vented to the atmosphere. Where tanks are located in the hoistway, they shall be vented to prevent accumulation of fumes in the hoistway and their covers shall be of sufficient strength to resist falling objects.”

III. PURPOSE

It is necessary that suitable ventilation of tanks containing hydrocarbon fluids be provided to avoid unnecessary odors discernible by building occupants which result in needless notification of the Fire Department and subsequent response.

Where hydraulic tanks used for operation of elevators are to be located in the hoistway, one of the following provisions shall apply:

A. The tank shall be vented to the building exterior as recommended by the equipment manufacturer. All building construction requirements for penetrations and structural support of piping shall be maintained.
B. The tank shall be provided with a replaceable filter element contained within a housing securely affixed to the tank in the filter manufacturer’s approved orientation using standard NPT connections. Filter element and housing shall be commercial-grade and from one manufacturer. Installation of the filter unit on the tank shall be as approved by the elevator manufacturer. Filter elements shall comply with the following:

1. Filter elements shall have an activated carbon element to remove oil vapor, fumes and odors from air expelled into the hoistway from the tank.

2. Filter units shall operate within the temperature and humidity range of the installed environment per the filter manufacturer’s specifications.

3. Filter units shall be of sufficient construction to withstand the use to which it is exposed.

4. Filter may be a combined Filter/Breather unit.

5. All tank seals shall be maintained in accordance with the elevator manufacturers’ instructions. Such maintenance shall be documented in the conveyance maintenance log.

6. Elevator Maintenance Control Plan (MCP) shall include procedures for checking and replacing filter elements. The MCP shall include direction that filters shall be replaced at no greater than five years from date of installation. Installation and replacement of filters shall be documented in the conveyance maintenance log.

Installations resulting in reports to the fire department of objectionable odors from the hoistway shall be immediately corrected by the building owner, or the elevator shall be placed out of service until corrective action can be taken. Corrective action shall be approved by the Fire Department.

END OF DOCUMENT